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To demonstrate creative methods and materials for the remediation of severe learning disabilities, to help children with these difficulties, and to train professional personnel, six teachers working in teams of two taught seven remedial classes with a maximum of 12 students using a program designed to remediate deficiencies in the auditory, aural, visual and motor areas. They taught basic reading skills to functional non-readers in grades 3 through 6; and focused on reading skills with less remediation of perceptual-motor deficiencies in two elementary classes and three secondary classes. Two 10-week in-service courses presented the theory and methods of remediation. Visitors and participants answered questionnaires and indicated that their involvement with the Learning Center was valuable; all classes but one made progress at the .05 level of significance in all areas of reading and spelling; and structured teacher ratings showed few changes in student attitudes and behavior. Informal comments of teachers and aides, parent questionnaire responses, and student interviews, however, indicated positive changes in the students' attitudes toward school and learning. An outline of the instructional methods and materials is included. [Not available in hard copy due to marginal legibility of original document.] (LE)

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THE LEARNING CENTER

A Model Exemplary Clinic For Learning Disabilities

RIVERSIDE UNIFIED SCHOOL DISTRICT - - - - RIVERSIDE, CALIFORNIA

Established by a Grant under Title III
Elementary and Secondary Education Act
(P.L. 89-10)

RIVERSIDE UNIFIED SCHOOL DISTRICT
Riverside, California

A MODEL EXEMPLARY CLINIC FOR LEARNING DISABILITIES

A PROJECT OF TITLE III, ESEA

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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July 22, 1967

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PREFACE

The report you are about to read is a fascinating story of children--not books or equipment or even teachers although all of these "things" played an important part. These live models in many cases for the first time actually read like other children. They too could learn, speak up in class and be a school success. Of course, not all became stars overnight and gains ranged from small to considerable rather than miraculous. We appreciate the opportunity to demonstrate what a single district working with the Federal and State Governments, a university, county offices, other districts, dedicated teachers, competent specialists, committed volunteers and concerned parents can do for boys and girls who are in critical educational need. Our hope is that these efforts may both light and point the way.

BRUCE MILLER, Superintendent

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RIVERSIDE UNIFIED SCHOOL DISTRICT
Riverside, California

THE LEARNING CENTER
A Model Exemplary Clinic for Learning Disabilities

OVERVIEW

The purpose of this report is to present a detailed description and evaluation of the E.S.E.A. Title III Project #OEG 4-6-000680-350, clinic school established by the Riverside Unified School District and known as the Learning Center. Practical opportunities and constraints may have dictated slight departures from the program projected in the funding proposal. Therefore, the program is described here as it actually existed in operation during the 1966-67 school year.

Objectives

The Learning Center's objectives were to demonstrate creative methods and materials for the remediation of severe learning disabilities, to help children with such difficulties, and to train professional personnel in this specialized area of learning/teaching.

Description of Remedial Instruction Classes

Seven remedial classes, with a maximum class size of twelve students were taught by six teachers working in teams of two. There were two teams for the elementary grades and one for the secondary.

The program was divided into two levels of remediation. The two classes at Level I consisted of functional non-readers in grades 3 through 6. These classes were designed to remediate deficiencies in the auditory, oral, visual, and motor areas which affect receptivity to learning, and to teach certain basic reading skills. Level II was more specifically focused on teaching reading skills with less remediation of perceptual-motor deficiencies. In Level II there were two elementary classes and three secondary classes. All secondary students and two of the elementary groups attended their regular school classes concurrently.

Visitors

Visitors were given an overview of the organization and operation of the Learning Center. They then observed the application of materials and methods in the classrooms.

Professional Advancement

Two ten-week in-service training courses presented the theory and methods of remediation of severe learning difficulties to regular and remedial reading classroom teachers from Riverside Unified School District and surrounding areas. Two series of siminars were conducted on methods of perceptual/motor training in kindergarten.

Evaluation Design

To evaluate the objectives of the Learning Center, reactions, opinions and criticisms were solicited by questionnaires filled out by visitors, in-service course participants and parents of students. Measures of visual perception and academic achievement were administered to students at the beginning and end of the period of instruction. In addition, pre- and post-program teachers' ratings of attitudes and behavior were obtained. A structured interview was conducted with each student toward the end of the period of instruction to assess his perception of his academic progress and the clinic school.

Program Results

All test and questionnaire results and statistical tests of the children's progress are presented in the report that follows.

Almost all visitors and in-service participants indicated that their involvement with the Learning Center was quite valuable. Many reported that the Learning Center stimulated and aided planning or implementation of similar classes or clinic schools, and prompted the use of special methods and materials in regular school classrooms.

All classes made significant progress in all reading areas of instruction. Structured teacher ratings showed few changes in attitude and behavior of the students at either the Learning Center or in their regular school classrooms. However, informal comments of teachers, playground social behavior change observed by aides, parent questionnaire responses, student interviews, and the academic achievement of the students indicated positive changes in the students' attitudes toward school and learning.

A separate section presents implications and recommendations for future clinic school programs. A detailed outline of the instructional methods and materials used is presented in Chapter I. Included in the appendix are copies of forms used at the Learning Center and lists of measurement instruments employed in evaluation.

CHAPTER I

DESCRIPTION

The Learning Center occupies six classrooms in a centrally located modern elementary school, including an instructional materials center, consultation offices, a staff room, and main office.

The Learning Center had three major objectives: To provide remedial instruction to small groups of children with severe reading disabilities related to audio, oral, visual, and motor deficiencies which may affect receptivity to learning.

To function as an exemplary model in demonstrating the use of new and innovative methods and materials for the remediation of gross reading deficiencies and dysfunctions of visual perception, auditory discrimination, motor coordination and/or communicative expression.

To train professional personnel in the theory, method, and use of materials for such remediation.

Instructional Program

General Organization: The month of September, 1966, was devoted to specific classroom and program organization by the teaching teams, and diagnosis, consultation, and placement of students within the appropriate area of the program. Instruction began on October 3, 1966, and continued until June 16, 1967.

Six teachers worked in teams of two, with a maximum class size of twelve students. There were two teams for the elementary grades and one for the secondary. Table I shows the number of students in each area and their regular school grade level.

The instructional program was divided into two levels of remediation. Level I was designed to remediate areas of deficiency in receptivity to learning and to teach certain basic initial reading skills. Level II was more specifically focused on teaching reading skills with less training of perceptual-motor deficiencies. In addition to reading, both levels incorporated some supportive activities including creative expression, language arts, mathematics, physical education, and artistic-aesthetic experiences and expression.

Table I. Number of Students in Each Learning Center Program, Listed by Grade Level.

	Level I		Level II			
Grade	A.M.	P.M.	A.M.	P.M.	Secondary	
3	3	1		1		
4	6	5	4	4		
5	2	4	5	2		
6	1	2	2	5		
7					8	
8					11	
9					3	
10					5	
11					3	
12					1	
TOTALS	12	12	11	12	31	78

Elementary Program

Level I consisted of functional non-readers in grades 3 through 6 who appeared to be of at least average intelligence, and who had been diagnosed as displaying one or more learning receptivity deficiencies or dysfunctions in the auditory, oral, visual, or motor areas. Primary emphasis was placed upon training in these physiological and behavioral areas.

Level II further subdivided into elementary, grades 3 through 6, and secondary grade levels. These students, too, were of at least average intelligence, and displayed some basic perceptual/behavioral deficiencies. Although they were at least two years below grade level in reading, they had some reading skills, or had displayed readiness for a developmental reading program either through initial testing, or progress evaluation in Level I. In Level II the specific focus was on reading per se. However, training in areas of perceptual-motor deficiencies remained an integral function, to the degree that individual needs existed.

Elementary children were grouped according to the intensity of remedial instruction needed, based on the intake diagnostic testing. They were assigned to either the morning class for three hours each day, or the afternoon class for an hour and a half, four days per week. The afternoon students attended their regular school in the morning. Students in the morning classes initially attended no other school. As the students progressed, some were judged to be ready to function limitedly in regular school in the afternoon.

In the Level I program emphasis was on the development of visual, motor and auditory perception. Training in figure-ground discernment, awareness of position in space, awareness of direction (left-to-right), spatial relationships, form constancy, and eye-hand coordination were part of the daily program.

Auditory training and listening skill training were provided each day with such exercises as sound sequencing, language lessons using the Peabody Language Development Program, vocal phonics, following directions, auditory memory exercises, class discussions, story sequencing, and other aural-oral experiences.

Gross motor training of the large muscle skills in walking, hopping, balancing, and running were explicitly taught. Practice on the balance board, jump rope, and left-right exercises emphasizing direction, position in space, and body image were also included.

Language arts lessons, using the pupil-dictated stories, chart stories, and, as the students progressed, their own written stories provided reading and writing experiences. Dr. Donald Durrell's Speech-To-Print Program was used. Dr. Donald P. Smith's Successive Discrimination Program was used during the last two months.of school. Some individualized reading in trade books, which pupils selected, was introduced as they were ready for independent reading.

Many other activities were included in the program as were suitable. A genuine effort was made to avoid a structured school environment. Informality, acceptance, spontaneity, and fun were all important. Holidays and birthdays were observed. Costume parties, cooking, art activities, dramatic play, games, and role-playing added color and adventure to the school program.

The Level II elementary instructional program followed many of the precepts of the Level I program. Students continued to receive training in gross motor skills and eye-hand coordination training. In addition, formal handwriting and spelling lessons were conducted. Language arts were taught at a more mature level. Pupils wrote frequently with the Fernald method of word tracing. Development of individual spelling word boxes was part of the expressive written language program.

In addition, a structured spelling program was taught, using the Botel-Multi-Level spelling materials. Students were placed at their individual achievement level and progressed at the rate which was successful for them.

Programmed reading workbooks were used. Students progressed at their individual rates. Individualized reading of self-selected books was encouraged. For students weak in grapheme-phomeme correspondence special training and exercises were provided.

Reading games, phonics tapes, story records, listening tapes of children's stories and poetry, as well as literature appreciation lessons (stories read by the teacher followed by group discussion) were an integral part of the language development program.

Instruction was individualized on the basis of assessment of each student's skills. The methods and materials were then selected which were appropriate. Not all students operated effectively in any one particular approach. Some children responded to programmed material and worked in it purposefully. Others found it redundant and monotonous. Some children wanted to work in basal textbooks. They found the brief stories more appealing than a long continuous story. Others got particular satisfaction from the reading and completing of library books.

Arithmetic was taught on an individual basis. Students displayed an array of achievement levels. Computational skills were emphasized, along with developing mathematical concepts.

Secondary Program

Three daily secondary class periods operated for an hour and a half each. There was no basic difference between these classes. They differed only as the specific needs of the students within each group varied. All secondary students in the program attended regular junior or senior high school classes for the remainder of the school day.

Since conventional teaching and remediation methods had met with little success in the previous academic experiences of the Learning Center students, the operating philosophy of the Learning Center was based on "prescriptive teaching." Such an approach matches the " treatment" to the specifically diagnosed perceptual-motor behavioral difficulty and related reading skills, such as letter discrimination, phonetic word attack, or sentence comprehension. Each student's program was individualized and specified for his primary diagnozed needs. For this reason, length of attendance at the Learning Center was flexible. Some students returned to regular school and others began attending the Learning Center at various times during the instructional year.

Students from grades 7 through 12 attended the Learning Center in groups of twelve for periods of one and one-half hours. Students were selected by geographic areas. No attempt was made to select equal representation by grade levels. The instructional groups were non-graded and the program was individualized. Mixed age grouping for instruction on the basis of common learning problems worked effectively. Students were regrouped for various activities. Individualized instruction on a one-to-one basis was also employed. Students worked individually with staff teachers, the psychologist, the speech and hearing specialist and volunteers.

The instructional program in many ways was similar to the elementary Level II program, but content for instruction was selected for teenage interest. A Language Arts experience approach to reading and writing was used. Students dictated stories or taped them. These were typed and initial reading, writing, and spelling instruction were developed from the students' own language. Spelling was taught using the Fernald method, and students made their own individual study word dictionary boxes. Some students were in a developmental spelling program using the Botel multi-level spelling materials.

Sullivan Programmed Reading materials were used with specific workbook exercises. Four basic sets of materials gave the students a variety of experiences: The Reading Spectrum, MacMillan Company, McCall-Crabbs Standard Test Lessons on Reading, Specific Skills Series, Barnell Loft, Ltd., and Word Wheels, Webster Division, McGraw Hill.

Students read on a self-selection basis from trade books, Scholastic paperback books for reluctant readers, and the S.R.A. Pilot Library.

Perceptual-motor training was provided for students who exhibited perceptual problems. The stereo-reader, Winter Haven forms, Ann Arbor Visual Tracking exercises, Frostig materials, and Continental Press materials were also included in the program. Auditory discrimination training, speech accuracy, expressive oral language skills, auditory memory, and verbal sequencing were included in the daily program.

Special assistance was given students in reading skills and work study skills for courses in their regular school program. The clinic staff met with individual students' teachers in government, world cultures and other disciplines to plan study programs in which Learning Center students could succeed.

Length of Instructional Program

As mentioned, there were several attendance patterns going on simultaneously at the Learning Center. Elementary children attended in two different sections, Level I and Level II and for several different periods of time.

Initially, morning students in the elementary program attended the Learning Center only from 9:00 a.m. to 12:00 noon. As the program went along adjustments were made that seemed suitable for specific students. Some were permitted to return to their home school programs when it was felt that they had enough tolerance for a full day at school, and when the afternoon program to which the child was returning, was appropriate.

Afternoon students in the elementary program all had attended their regular school in the morning. Their afternoon session was for one and one-half hours for four days per week. On Friday afternoons students remained at their home school. This arrangement was made in order to provide a free afternoon for clinic staff meetings and planning, not because it was felt that four days per week was sufficient for students.

Students were reassigned, after careful assessment, sometimes from the morning program to the afternoon session. In other words, they went from full morning clinic program back to their regular school, but continued with special help by attending the afternoon clinic program.

In a number of situations, staff wished to reassign students from morning to afternoon but were unable to do so, because there was no vacancy. Although in the project it was stated that pupils would flow from one level to another or from one program (a.m.) to the other (p.m.), this was not operable because there was no way to place children unless there was a vacancy.

Periodically Level I and Level II staff would meet and the total group of children were surveyed. Reassignment or switching was done when both a Level I and Level II student needed to be changed. The period of time that was the most suitable depended on the needs of the individual student.

A suggestion might be made that with few exceptions those children attending the morning program should return to regular school in the afternoon. For certain children, three hours of group living is all that can be tolerated.

Children who did not attend school in the afternoon had some of the following problems:

1. No supervision at home.
2. Sense of being isolated from peers (everyone else is in school).
3. Purposeful, worthwhile experiences in the afternoon lacking. Much television watching and aimless wandering about in the neighborhood.
4. Missed opportunity to learn other academic studies not presented at Learning Center--social studies, science, art, music.
5. Having a different school day, emphasized the feeling of being different. Children for the most part want to do what other children do.

For some children, particularly those from sizable families, the free-at-home afternoons gave the parent and child time together that was just theirs. The youngster with little coping ability and easily fatigued had had enough group experiences in three hours of school.

The implication is that school programming should be flexible--not fit the child to the program but the program to the child.

Instructional Materials

School supplies, instructional aides, audio-visual equipment, and supplementary library books were purchased for the learning Center program.

Considerable caution was exercised not to develop a gadget center. Basic audio visual equipment commonly used in schools and readily available to teacher observers in their schools was the prerogative. Film strip viewers, record players, overhead projectors, and tape recorders were the basic equipment. A few new audio visual machines and programs were purchased on a one-of-a-kind basis to use as pilot programs to test their effectiveness. The Technicolor 8mm projector and single concept five-minute films were successful with the students. The limitation was the availability of suitable films. Production has been very recent. The Hoffman Mark IV program was enthusiastically enjoyed by the secondary and upper elementary children. This program was excellent for motivation and concept building.

Programmed reading materials were used for specific students. High interest low vocabulary book series in hard bound copies were purchased.

The Michigan Successive Discrimination Series was exceptionally effective with students. This is a programmed material in workbook form and comparatively expensive. Teachers and students like it so well that we will try to devise a way to use the material with acetate covers on the worksheets or vanishing pencil so workbooks can be used more than once.

No one material or pre-designed curriculum was used at the Learning Center as the instructional program was based on individual prescription.

Personnel

Comprehensive job descriptions are available on request. Included in this report is a brief description of staff roles and responsibilities. Learning Center staff consisted of:

- Director
- Psychologist
- Speech and Hearing Pathologist
- Six Certificated Teachers
- Secretary
- Nurse (one day per week)
- Research Assistant
- Two Teachers' Aides

For the most part, the staff was selected from among district personnel who had the proper certification, training and/or experience. The secondary teachers and the speech specialist were hired as new employees to the district.

All staff, except the speech specialist, were experienced educators. Each had had training and/or experience in some specialized area of remedial reading, working with the disadvantaged, speech pathology, psychology, and/or the education of the exceptional child. Teaching staff were certificated Specialist Teachers in Reading, qualifying through examination by the State of California.

Professional responsibilities of clinic staff were more comprehensive than required by personnel in the usual school assignment.

The Learning Center, as an exemplary model, operated as a demonstration center - classrooms were on continuous display. Consulting with visitors was a major duty of all staff members.

Staff organized and presented seminars, in-service courses and demonstration lessons. Consulting with regular classroom teachers on program for students who attended both the Learning Center and regular school, demonstrating special techniques and materials which could be used in regular classrooms, and meeting with counselors, administrators and other personnel to plan special adaptive programs within the schools were services clinic staff provided.

Experimentation with new materials and methods required continuous professional study and investigation. Clinic staff participated in community organizations as members and guests to promote public understanding of special federal programs.

Director:
- Administrative role of a building principal
- Leadership and supervisory role in the development of the innovative program
- School management
- Office management
- Personnel management
- Clinic program - instruction and curriculum
  - dissemination of information
  - public relations
  - staff leadership
  - parent and student counseling
  - visitors' orientation
  - publications
  - in-service
  - evaluation of clinic program
  - volunteer program

Psychologist:
- Psychological assessment of students -
  - for admission to program
  - for specific diagnosis and treatment
- Clinic treatment - recommendations for specific techniques and materials
- Liaison within district between Learning Center and schools
- Counseling of parents and students
- Consultant to Learning Center staff on the development of Learning Center program
- In-service
- Orientation of visitors and observers

Research Assistant:
- Assessment and evaluation
- Statistical analysis and research design
- Consultant to staff
- Dissemination of information

Speech and Hearing Pathologist:
- Assessment and diagnosis of students -
  - auditory reception
  - speech production
  - language development
- Remedial program for specific disabilities
- Consultant to staff
- Demonstration teaching
- In-service
- Parent and student counseling

Nurse:
- Duties and responsibilities of school nurse
- General health appraisal of students
- Vision and auditory screening
- Health histories
- Liaison with medical profession in regard to particular problems of clinic students
- Parent contacts regarding health problems
- Health record keeping
- Student counseling
- Health consultant to clinic staff

Certificated Teachers: Duties of a regular classroom teacher
Instructional program
Classroom management and environment
Testing and assessment of students
Record keeping - anecdotal case studies
Demonstration
Student Counseling
Instructional materials and aides
Conferencing with regular classroom teachers
Parent conferencing
Training of volunteers
In-service
Public relations

Secretary: Duties of regular school secretary
Correspondence - national, state, and local inquiry required constant correspondence
Curriculum reports
In-service materials
Intra-district information - new program required extensive dissemination of information
Special records and forms

Teachers' Aides: Recording keeping
Classroom environment
Testing
Maintenance of Instructional Materials Center
Tutorial instruction
Playground supervision
Specific remedial training assigned by psychologist for individual children
Instructional aides for lessons

Student Population

Students selected for the Learning Center program exhibited severe reading retardation (more than two years), language development lag, immature motor function, conceptual deficiencies, perceptual confusions, poor self image, weak impulse control, hyperativity, short attention span, lack of motivation, inability in auditory and visual discrimination, and poor social-emotional adjustment.

Significant discrepancy between potential to learn and achievement was the initial criteria for eligibility to the program. This was determined by performance on the Weschler individual intelligence test. Identified slow learners were not accepted.

Students with severe emotional problems or physical handicaps were not included. Most pupils did, however, have some emotional and behavioral disorders. If the students' adjustment problems appeared to be secondary and if the clinic program was appropriate, applicants were accepted. The school populations, both public and private, from which Learning Center students were selected, had more eligible students identified than could be placed in the program. Selection thus had to be based on several other criteria in addition to pupils' instructional needs. Effort was made to select at least one student from each of the non-public and public elementary schools, junior high schools and senior high schools. Two or more students were selected from schools of large enrollments. Priority was established in rank order by date of application. Known cases, which historically had been consultant service cases or on the files of psychological services were considered before more recent referrals.

Admission Procedure

Application for admission was submitted to the Learning Center by building principals. Identification originated with classroom teachers, corrective reading teachers, school psychologists, principals, and counselors. The application form requested significant data on the applicants' school performance, test results and behavior patterns. A sample of this form is included in the appendix.

When an applicant was to be considered, the Learning Center psychologist made a record search of test data, did further diagnostic testing when necessary, and met with the applicant's teacher and/or principal. When it was determined that the applicant was eligible, a conference was held with parents to discuss the Learning Center program and to secure information regarding the student's health history, learning problem and other pertinent information. At the time a student was admitted to the Learning Center, an individual prescriptive instructional program was designed, based on a thorough case study. The case study included psychological testing, diagnostic achievement assessment, family history, health assessment and referral, and school performance records from the regular classroom teacher.

Clinic cases exhibited a constellation of difficulties. For all students there was no single disability and consequently there was no single remedial solution.

Learning Center Observation/Demonstration

Educators from 30 school districts in California visited the Learning Center during the 1966-67 school year. In addition, visitors came from out-of-state and other countries. They were presented an overview of the objectives and functioning of the clinic. The special methods and materials employed were explained, and classrooms were observed to demonstrate their actual applications.

Visitors came to observe for a variety of purposes. Primarily their interest was in the methodology, techniques, and materials used for remediating learning disabilities. In addition, concerns of visitors were the administrative and organizational structure, such as admission procedure, testing assessment and diagnosis, record keeping, procurement of materials and equipment, transportation, communication and dissemination of information. Sample sets of the organizational design, printed forms and other record-keeping devices, lists of tests used, and bibliographies of books and materials were given to visitors.

Visitors had an opportunity to appraise materials on display in the Instructional Materials Center. The Instructional Materials Center is a resource laboratory with sample sets of all materials used with the students and additional sample sets of materials available on the market. The clinic staff assisted visitors in the selection of appropriate materials for special remedial and developmental learning tasks by demonstrating the use of these materials with students.

Visitors setting up programs in their own school districts were anxious to make prudent selections from the extensive variety of materials available. With the pressure of getting programs established, they frequently expressed an interest in the quality and sound design of workbooks, filmstrips, programmed materials and other teaching aides. As a demonstration and exploratory program, the Learning Center did assess the effectiveness of various methods and materials, stipulating, of course, that our evaluation was based on our given pupil population and our particular program.

Television

Closed circuit television for observation of classrooms by visitors demonstration teaching, teacher self-evaluation, and in-service instructional films have been purchased. Due to late delivery, television demonstrations for visitors were in operation only the last six weeks of the Learning Center program. The initial trials were very promising and frequent use is anticipated in the fall.

Students became accustomed to the few adjustments which had to be made for televising. Television equipment at the Learning Center is in a room which was specially adapted for its use. Recording is made through an aperture in the wall. The only classroom changes necessary were in the placement of furniture and microphones.

Professional Advancement

A ten-week in-service course was offered each semester by the Learning Center staff. Thirty-nine teachers attended the fall semester and 30 attended in the spring. Theoretical bases and methods of diagnosis of severe learning difficulties and their underlying theoretical physiological/behavioral correlates were presented. Major emphasis was given to methods and materials for remediation, and ways in which they may be adapted for use by regular classroom teachers.

The content of the meetings included:

1. A survey of psychological tests and discussion of the use of test results diagnostically
2. A review of reading tests, both achievement and diagnostic instruments and their appropriate use
3. A presentation of methods and materials to use for correction or perceptual difficulties
4. A study of the development of auditory and vocal language
5. Techniques for the development of listening skills
6. Multi-sensory approaches to the correction of learning difficulties
7. The socio-emotional factors in learning
8. Planning for individual differences

The presentations were primarily of a lecture nature with class participation in discussion.

Two series of four special seminars were conducted with kindergarten teachers. The purpose of these seminars was to develop activities for early perceptual-motor training and verbal communication development. Fourteen participated in the first seminar series, and 20 attended the second.

Transportation

All students attending the Learning Center were brought to the clinic school by school bus. Because elementary children came from a large number of public schools and also from parochial schools, the bussing schedule was very complex. Some students had an hour's ride on the bus from a distance that would have taken fifteen minutes by automobile, but the two buses made circuitous routes, picking up one or two children at each stop, and finally bringing the group to the Learning Center.

The students, as a group, were those kinds of youngsters who tire easily, resolve their peer conflicts physically, and have a low level of self control. Misbehavior on the bus was a daily occurrence. Further, the youngsters would arrive irritable and disorderly. They were kept in control but the conditions of the bus travel promoted conflicts rather than reduced them.

Secondary students were picked up at fewer bus stops, but other problems were present. Again these students were typically irresponsible and more prone to disorderly conduct. The secondary program at the Learning Center was for one and one-half hours with transportation to or from the Learning Center of about 20 minutes. Originally it was planned that junior and senior high students would miss two periods of their regular school time. However, various schools had different program schedules. There was no way to transport students and not have them leave classes at the midpoint or return after class had been in session for a half period. During the last few weeks of the program some secondary students drove their own cars, with parents' written approval.

It would seem reasonable to expect parents to provide whatever transportation was necessary. In the early part of the program, Spring of 1966, parents either brought their children or made arrangements for them to be transported.

One consideration should be that no student be denied attendance because parents could not provide transportation. For such hardship cases, budget allowance should be provided for taxi service or other transportation.

Advisory Council

An advisory council to the clinic consisted of Riverside Unified School District personnel, representatives from parochial schools, from the University of California at Riverside, and personnel from the Riverside County Schools. A list of the council personnel is included in the appendix.

The function of the Advisory Council was to advise in the development of the emerging clinic program in whatever area needed assistance--administration, student selection, testing and research, evaluation and/or curriculum, methodology.

An attempt was made initially to hold Advisory Council meetings every six weeks. This did not prove satisfactory. At each council meeting several members were unable to attend. It became apparent that each council member had a very demanding role in his own work and that it was nearly impossible to set a time for meeting that was satisfactory to all. Council members were then asked to assist when their particular skills were needed.

General council meetings were then held at longer intervals of time (about three months) at which time progress reports of the clinic operation were presented.

Volunteers

The volunteer program at the Learning Center was one of the most rewarding of its innovative functions. Over a thousand hours of volunteer assistance was donated. Volunteers were housewives, teachers (not presently employed) and college students.

The services of clinic volunteers consisted of assistance to the clinic staff in non-teaching tasks such as stenographic and clerical work and the construction of instructional aids, such as reading games, puzzles, and bulletin boards. Volunteers also worked directly with individual children under the direct guidance of the classroom teachers. The one-to-one teaching by volunteers under the supervision of the clinic teachers permitted greater individualization of the instructional program.

Visitors were impressed with the effectiveness of using volunteers to help children whose instructional needs were difficult to meet in a group situation.

Volunteer help provided special services to children without increasing instructional costs. The Learning Center staff felt that volunteers made individualization of instruction possible and recommended the program be continued. This method of classroom assistance could be extended to the use of apprentice teachers.

A further outcome of the volunteer training program was that several volunteers, having served on apprenticeship at the Learning Center, were able to secure "paid aide" jobs. Thus, not only were children helped, but adults gained new marketable skills.

There are some considerations which should be kept in mind when establishing a volunteer program. The volunteer should be guided at all times by school policy and serve under the close direction of school personnel, but should never substitute for them. Pre-service orientation is necessary to prepare volunteers for an understanding of their role and the objectives of the school program.

During a special interview, each volunteer applicant should be made aware of the unique needs of the particular students with whom he may be working. He should be cautioned in a non-threatening way that in some cases assignments may not be mutually beneficial, and reassignment may be necessary.

Volunteers who work on a one-to-one basis with individual children must serve at least twice a week. Less frequent help would not allow for sequentially developed instruction.

Working with and training volunteers initially places additional work on classroom teachers. The teacher must, in fact, train these adults along with all their other teaching tasks. The Learning Center staff felt that the additional responsibility, while difficult in the initial stages, was well worth the effort.

Evaluation Design

To evaluate the objectives of the Learning Center, reactions, opinions and criticisms were solicited by questionnaires filled out by visitors, in-service course participants, and parents of students. Measures of visual perception and academic achievement were administered to students at the beginning and end of the period of instruction. In addition, pre- and post-program teachers' ratings of attitudes and behavior were obtained. A structured interview was conducted with each student toward the end of the period of instruction to assess his perception of his academic progress and the clinic school.

Program Results

All test and questionnaire results, and statistical tests of the childrens' progress are presented in the report that follows.

Almost all visitors and in-service participants indicated that their involvement with the Learning Center was quite valuable. Many reported that the Learning Center stimulated and aided planning or implementation of similar classes or clinic schools, and the use of special methods and materials in regular school classrooms.

All classes made significant progress in all reading areas of instruction. Structured teacher ratings showed few changes in attitude and behavior of students at either the Learning Center or in their regular school classrooms. However, informal comments of teachers, playground social behavior change observed by aides, parent questionnaire responses, student interviews, and the academic achievement of the students indicated positive changes in the students' attitudes toward school and learning.

A separate section presents implications and recommendations for future clinic school programs. A detailed outline of the instructional methods and materials used is presented in the appendix. Also, included in the appendix are copies of forms used at the Learning Center, and lists of measurement instruments employed in the evaluation.

CHAPTER II

LEARNING CENTER EVALUATION DESIGN

To determine the extent to which the Learning Center was effective in terms of purported objectives and purposes, the evaluation was necessarily many faceted.

Observation/Demonstration

In assessing the value of the program in providing an exemplary model clinic school, tabulations were made of the number of visitors and school districts represented, and the number of visitors from within the district. Additionally, feedback from visitors was requested via questionnaires to determine the effect which the Learning Center example had on existing programs or the planning and implementation of new ones, and to get opinions of present Learning Center functioning.

Professional Advancement

To assess the value of the in-service courses, guest speakers, special consultants, and lectures, participants were requested to evaluate these services by questionnaire.

Remedial Instruction

Reading, Arithmetic, and Spelling: Metropolitan Achievement Tests were given at the beginning of the fall semester (October, 1966) and at the end of the spring semester (May, 1967) to assess academic progress. Students entering the program late, or terminating prior to the end of the year, were tested at those respective times. Reading, arithmetic, and spelling were measured.

Basic Reading Skills: Some gains may be measurable only in terms of smaller units of the reading process. Therefore, pre and post-testing with the Gates-McKillop Reading Diagnostic Test, Part V, was done to assess basic alphabet recognition, sound-symbol association, and phonetic word attack.

Visual-Perception: Because current reading disability theory emphasized visual-perceptual abilities, the Frostig Developmental Test of Visual Perception was administered to Level I students at the beginning and end of the period of instruction.

Attitudes and Behavior: Since attitudes, motivation, and behavior are effected by, and contribute to academic achievement, the School and Classroom Adjustment Rating Inventory was developed and used in rating each child by his Learning Center Teacher, and by his regular school teacher for those pupils who also attended some regular school classes.

To further assess attitudes toward the Learning Center clinic program and the perceived effect which the program had on the behavior, attitudes, and functioning of the children, structured interviews were conducted with all the students. In addition, parents were asked to complete a questionnaire pertaining to their child's academic progress, behavior attitudes.

Pre-test and post-test data were compared for all tests, for each group within the clinic. Changes in teacher ratings, and visual-perception performances were compared, respectively, to the measures of academic progress.

Table 2 presents a summary of the evaluation design. A list of all tests used in the evaluation, and copies of non-standardized measurement instruments are included in the Appendix to this report.

TABLE 2

EVALUATION DESIGN SUMMARY

Group	Variable	Instrument	Type of Data	Schedule
Level I and Level II Students	Reading Achieve.	Gates-McKillop Read. Diag. Test, Pt. V	Objective	Oct., 1966 May, 1967
		Metropolitan Ach. Tests	Objective	Oct., 1966 May, 1967
Level I and Level II Students	Arithmetic Achieve.	Metro. Ach. Tests	Objective	Oct., 1966 May, 1967
Level I and Level II Students	Attitudes, Motivation & Behavior	Rating Inventory	Subjective	Oct. 1966 May, 1967
Level I Students	Visual Perception	Frostig Test	Objective	Oct., 1966 May, 1967
Visitors	Affect of Exemplary Model	Questionnaire	Subjective	May, 1967
In-Service Teachers	Professional Training Value	Questionnaire	Subjective	Feb., 1967 May, 1967
All Students	Attitudes Toward Clinic and Perceived Effect	Structured Interview	Subjective	May, 1967
All Parents	Attitudes Toward Clinic and Perceived Effect	Questionnaire	Subjective	May, 1967

CHAPTER III

PRESENTATION AND INTERPRETATION OF RESULTS

Learning Center Observation/Demonstration

Each of the items with structured answers on the Visitor's Questionnaire are reproduced below. Percentages of answers in each answer category are listed.

1. Were explanations clear and detailed enough if you were to attempt to apply the remedial materials and methods?

4.3	1.1	26.9	18.3	46.2	3.2
Too superficial		Need some additional information		Very clear & detailed	No answer

2. From your visit did you gain a clear understanding of how such a clinic is organized and operates?

2.2	3.2	16.1	23.7	53.8	1.1
Very unclear		Just adequate; somewhat sketchy		Very clear	No answer

3. What effect has the Learning Center example had on your thinking in terms augmenting present programs or methods, or implementing new ones? If the influence was negative - for example, toward a decision not to implement a pending plan, please explain.

7.5	4.3	31.2	16.1	33.3	7.5
No effect		Some influence		Very significant influence	No answer

4. Check any of the following which is applicable to your district.

No Answer 18.3

28.0 Planning a clinic school or special clinic-type remedial classes within regular school(s).

46.2 Plan to introduce special methods and materials in regular classes for those with reading difficulties.

7.5 No such plans for foreseeable future.

26.9 Would consider such plans if financial aid were available.

Percentages for the respective answer categories of item 4 may not total 100% due to the fact that the answer categories are not mutually exclusive. More than one was often marked. A total of 93 Visitor Questionnaires were returned.

Summary: Most visitors indicated on the questionnaire that they gained a clear understanding of the organization and operation of a clinic school like the Learning Center, and of the remedial materials and methods employed. Eighty-one percent said that their visit to the Learning Center had influenced their thinking in terms of future curriculum or program plans for their class, school, or school district. Seventy-four percent are planning to employ the methods and materials observed. Twenty-eight percent are involved in the planning and organization of clinic schools or remedial classes.

Significance: Clinic observation was considered beneficial to other teachers and school districts, and may be of major value if incorporated in future programs.

Professional Advancement

The items of the In-Service Course Participants' Questionnaire are reproduced below with the percentage of answers in each answer category.

1. Was the content of the course essentially new and different from what you already knew or had been exposed to?

12	8	68	8	4
Knew most of what was presented		Some familiar, some new		Never exposed to material. All new.

2. The information which you had previously known or been exposed to made it appear that children with severe academic deficiencies were:

0	0	40	4	56
Unable to learn by any method		Limited even with special methods		Able to learn with special methods

3. Explanations of diagnostic and remedial methods and materials presented in the course were:

4	0	12	40	44
Very unclear		Adequate; somewhat sketchy		Very clear

4. Were remedial methods and materials applicable to your classroom?

0	8	56	12	24
Unapplicable		Somewhat applicable		Very applicable

5. Were these methods presented in sufficient enough detail for you to apply?

4	0	28	40	24	4
Too superficial		Need some additional information		Very detailed	No answer

6. With remediation approaches such as those presented, most children who have not been able to learn with conventional teaching methods:

0	0	48	28	24
Will probably still not be able to learn		Will be able to learn to a limited degree		Will be as able to learn as other children

7. What is your reaction to the course in general?

0	0	8	44	48
Of no value to me		Interesting, mildly worthwhile		Very valuable to me

Summary: Ninety-two percent of the participants in the in-service training course felt that the course was of definite value to them. Although many participants had some initial familiarity with the course content, most indicated that they learned a great deal in terms of methods that could be adapted to their regular classroom. Eighty-four percent thought that the course materials were presented clearly, and sixty-four percent felt that methods were presented in sufficient detail that teachers could apply them. Unstructured questionnaire comments suggest that teachers who attended the in-service course gained a greater appreciation of the problems of the child who is unable to learn by conventional teaching methods, and a more realistic attitude toward academic expectations of these students. Questionnaire comments also indicated that many teachers had introduced adaptations of the Learning Center materials and methods into their classrooms.

Significance: The in-service training course appears to have been very successful in teaching remedial techniques and in effecting more positive teacher attitudes toward children with learning difficulties. This conclusion is qualified in the Implications and Suggestions section of this report.

Parent Appraisal of Academic Adjustment: Parent questionnaire items are given below with percentages in each answer category.

				No Answer
1. He likes school	more 57%	less 1.5	about the same 41.5	0
2. He attempts to read	more 73.8	less 4.6	about the same 21.5	0
3. He seems happier	Yes 86.2	No 9.2	Same 3.1	1.5

4. He is more self-confident — No Answer
Yes 86.2   No 9.2   Same 1.5   3.1

5. If he goes to another school too, is he doing better in his regular school work?
Yes 70.2   No. 21.3   Same 8.5   -

6. Do you think he has improved in school?
A lot 47   A little 50   Not at all 0   3.1

Percentages for item 5 are based only on the number of people who answered the item. Sixty-five parent questionnaires were returned.

Summary: According to parents, 57% of the Learning Center students like school more; 74% attempt to read more; 86% appear to be happier and more self-confident; and 97% have improved in school.

Significance: Parents perceive the Learning Center as having had many positive effects on their respective children's general attitudes, motivation, and actual academic improvement.

Student Self-appraisal: Student interview items which have structured answers are listed below with percentages for each answer category.

2. Do you like school more or less than you used to?

Much less		About the same		Much more	No Answer
1.4	4.3	21.7	37.7	33.3	1.4

6. Do you try to do your best in school? How much of the time?

Not much of the time		Sometimes		Almost always	
0	1.4	29.0	29.0	37.7	2.9

7. Do you sometimes feel like not coming to school? Yes 87   No 13

Do you feel that way more or less than you used to?

Much less		About the same		Much more	No Answer
34.8	21.7	36.2	4.3	1.4	1.4

8. How are you doing in school now - better or worse?

Much worse		About the same		Much better	
0	4.3	8.7	43.5	42.0	1.4

9. Is it easier than it used to be for you to pay attention to your school work, or is it harder?

Much harder		About the same		Much easier	
1.4	10.1	17.4	33.3	36.2	1.4

10. Is reading easier for you?

0	1.4	7.2	40.6	50.7
Much harder		About the same		Much easier

11. Do you read at home for fun? Yes 78 No 22

More than you used to?

					No Answer
1.4	4.3	27.5	33.3	33.3	0
Much less		About the same		Much more	

13. Do you think that you still need help in learning some things?

Yes 87.0 No 7.2 What things? Don't know 4.3 1.4

14. If you could, would you like to go to this school again next year?

Yes 69.6 No 18.8 Don't know 4.3 7.2

Summary: During the student interview seventy-one percent said that they liked school more. Eighty-five percent felt that they were doing better in school since they started attending the Learning Center. Sixty-nine percent thought that it had become easier to pay attention to their schoolwork. Reading is easier for ninety-one percent of the students, and sixty-six percent increased the amount that they read for fun.

Significance: The Learning Center program appears to have effected positive motivation and attitude changes in the students. They perceive school as being easier, and themselves as improving. They like school more, and show greater interest in reading both in school and at home.

Teacher Appraisal of Academic Adjustment: Table 3 presents the ranges and distributions of the six attitude and behavior scores obtained from Learning Center teacher ratings using the School and Classroom Adjustment Rating Inventory.

TABLE 3: Summary of Descriptive data, School and classroom adjustment, Rating Inventory, Learning Center Teacher ratings.

		Academic Application		General Behavior		General Attitude		Confidence-Anxiety		Aggression-Withdrawal		Total Adjustment	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Level I	Q_3	34	40	24	25	11	13	15	18	17	19	94	112
	Md	32	37	21	23	11	12	14	16	16	18	88	107
	Q_1	26	35	12	16	9	9	13	13	13	13	77	89
Range		17-40	23-46	7-25	10-25	3-13	3-14	9-18	9-24	7-20	6-20	43-108	56-121
Level II	Q_3	33	35	23	16	12	10	15	15	14	14	93	85
	Md	31	34	15	13	10	8	12	14	13	13	82	77
	Q_1	24	32	5	9	6	7	9	12	12	11	59	75
Range		17-47	17-40	5-25	5-21	4-15	6-14	7-22	11-17	5-19	9-16	51-127	69-97
Secondary	Q_3	32	35	24	24	13	14	21	21	16	20	101	114
	Md	28	31	21	22	12	13	19	20	16	18	95	101
	Q_1	22	28	18	17	9	11	18	17	14	14	80	91
Range		18-36	14-38	9-25	6-25	5-15	7-15	9-23	15-24	10-20	13-20	71-113	55-121
Total Possible		50 (40)*		25		15		25		20		135 (125)*	

* Secondary only

Legend:

Q_1 --- First quartile score
Md --- Median score
Q_3 --- Third quartile score

TABLE 4: Summary of descriptive data, school and classroom adjustment, Rating Inventory. Regular classroom teacher ratings.

		Academic Application		General Behavior		General Attitude		Confidence-Anxiety		Aggression-Withdrawal		Total Adjustment	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
	Q_3	33	32	23	21	14	13	22	17	19	18	105	101
Level I	Md	26	25	20	18	13	11	16	16	18	15	100	86
	Q_1	20	19	18	15	11	9	14	12	13	14	78	81
Range		11-38	14-35	10-25	11-25	5-15	7-14	7-23	9-21	7-20	7-20	52-113	56-108
	Q_3	32	33	24	23	13	11	16	19	19	17	101	102
Level II	Md	24	30	23	21	12	8	15	16	15	14	87	83
	Q_1	22	19	10	19	10	7	13	14	13	11	79	76
Range		21-46	18-48	8-25	15-25	5-14	6-13	13-20	11-21	8-20	11-20	56-117	68-124
	Q_3	25	28	24	23	13	13	19	18	17	16	94	92
Secondary	Md	20	21	19	18	10	11	16	17	15	15	80	79
	Q_1	13	14	16	14	7	9	14	15	14	13	68	72
Range		10-28	10-35	8-25	9-24	3-15	4-14	11-23	13-23	11-19	9-19	46-105	60-113
Total Possible		50 (40)*		25		15		25		20		135 (125)*	

* Secondary Only

Legend:

Q_1 --- First quartile score

Md --- Median score

Q_3 --- Third quartile score

Changes in pre- and post-program median rating scores occurred in most areas for all classes. Statistical tests[1] of the significance of the differences between beginning and end of program ratings are summarized in Tables 5 and 6.

Table 5. School and Classroom Adjustment Rating Inventory, Comparison of beginning and end of program Learning Center Teacher Ratings using Wilcoxon Matched Pairs, signed ranks T tests.

	Level I						Level II						Secondary		
	Morning			Afternoon			Morning			Afternoon					
	N	T	P	N	T	P	N	T	P	N	T	P	N	T	P
Academic Application	9	0	* .01	6	3	> .05	8	13	> .05	6	9	.05	24	41	* .01
General Behavior	6	0	* .05	6	5	> .05	9	22	> .05	4	-	.05	20	82	> .05
General Attitude	9	3	* .01	5	-	> .05	9	22	> .05	5	-	.05	14	23	> .05
Confidence Anxiety	9	5	* .02	5	-	> .05	9	8	> .05	6	7	> .05	24	117	> .05
Aggression-Withdrawal	8	0	* .01	4	-	> .05	8	15	> .05	5	-	> .05	22	28	* .01
Total Adjustment	9	0	* .01	6	8	> .05	9	17	> .05	6	5	> .05	25	46	* .01

Note: [1] Symbols in all tables of this report are explained in the respective legends. However, some further explanation of the probability level of significance, P, may add clarity to interpretations based upon the tabled data. In each column headed "P", the decimal fractions indicate the degree of probability that the pre- and post-test differences in scores could have occurred by chance alone. A "P" value of .01 indicates that differences as large or extensive as those obtained could only occur one time in one hundred, if only chance factors were affecting the measurements. Any level of significance may be arbitrarily chosen, but the usual lower limit for testing most hypotheses of change is a P value of .05, or one chance in twenty that the measured difference could have occurred by "accident." If the value of "P" is equal to or less than .05, it is concluded that whatever was done in the time interval between tests caused the observed difference in scores.

Legend:
N - The number of pairs of pre- and post-ratings that differed.
T - The largest value (+ or -) of summed ranked differences.
P - The probability that a T value as small as that obtained could occur by chance alone.
* - Indicates statistically significant change.
- - In the Wilcoxon T test, when the number of pairs of data differ between the pre- and post-test is less than N-6, a T value need not be computed. The degree of change within the group is not significant.
> - Symbol meaning "greater than".

Table 6. School and Classroom Adjustment Rating Inventory, Comparison of beginning and end of program regular classroom teacher ratings using Wilcoxon T tests.

	Level I			Level II			Secondary		
	N	T	P	N	T	P	N	T	P
Academic Application	11	33	> .05	8	12	* .02	15	42	> .05
General Behavior	9	19	> .05	6	-8	> .05	15	49	> .05
General Attitude	12	25	> .05	7	6	> .05	16	42	> .05
Confidence Anxiety	9	13	> .05	7	17	> .05	14	37	> .05
Aggression-Withdrawal	7	3	> .05	5	-	> .05	11	25	> .05
Total Adjustment	10	16	> .05	8	18	> .05	15	38	> .05

The only significant gain according to regular school teacher ratings occurred in the area of academic application of the Level II elementary children. With this single exception, all groups were rated as having made no gains in any area.

Significance: According to both regular classroom and Learning Center teachers, attendance at the Learning Center effected few changes in behavior and attitude between the beginning and end of the program. The important exception was the Level I morning class which made significant gains in all areas rated. However, data based upon the School and Classroom Adjustment Rating Inventory should be viewed with caution, for the reliability and validity of the instrument are unknown. Further discussion of this point appears in the section on measurement instruments in the appendix.

Summary: The statistical tests of the School and Classroom Adjustment Rating Inventory indicate that, according to ratings by the Learning Center teachers, some of the classes made gains in some of the attitude and behavior areas. Secondary students gained in ability to apply themselves to their work, and showed less aggressive and withdrawal behavior. No changes were evidenced in the Level II elementary classes. The Level I morning class showed positive changes in all areas.

All other evidence casts suspicion on the above finding. It has already been reported that students and their parents have perceived important changes in attitude and motivation as a result of the Learning Center program. Further evidence of attitude change and increased motivation lies in the fact that many students who had received grades of "D" and "F" were receiving "C" grades by the end of the school year. In addition, informal comments of teachers, playground social behavior change observed by teachers and aides, and the academic achievement of the students (presented later in this report) indicate that positive changes in the students' attitudes toward school and learning did occur.

Visual-Perceptual Development: Statistical data for all measures of visual perceptual development are summarized in Table 7.

TABLE 7. Summary of descriptive data, Frostig Developmental Test of Visual Perception - Level I only.

		Eye-Motor Coordination		Figure-Ground Perception		Form Constancy		Position in Space		Spatial Orientation	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Morning Class	Q_3	21	22	19	20	16	17	8	8	7	8
	Md.	20	21	19	20	15	16	7	8	7	7
	Q_1	18	20	19	19	13	15	7	7	7	7
	Range	16-22	8-24	18-20	19-20	8-17	15-17	7-8	6-8	6-8	6-8
	Percent with Perfect Score	58	83	17	75	25	33	50	75	25	42
Afternoon Class	Q_3	21	21	20	20	15	16	8	8	8	8
	Md	20	19	19	20	13	14	8	8	7	7
	Q_1	17	17	19	19	12	13	7	8	7	7
	Range	15-25	16-26	12-20	15-20	11-17	12-17	6-8	5-8	6-8	6-8
	Percent with Perfect Score	60	40	40	70	10	20	70	80	40	30
Total Possible		30*		20		17		8		8	

* The ceiling of the perceptual age norms for eye-motor coordination score of 20. "Perfect score" percentages are based on the number that equalled or exceeded that score.

Legend:

Q_1 - First Quartile score

Md - Median score

Q_3 - Third Quartile score

Table 8 gives the results of the tests of statistical significance of the pre and post-test visual-perceptual score differences.

TABLE 8. Frostig Developmental Test of Visual Perception, Summary Data of comparisons of pre and post-test scores using Wilcoxon T tests, Level I only.

		Eye-motor Coordination	Fig.-ground Perception	Form Constancy	Position In Space	Spatial Orientation
Morning Class	N	10	7	10	6	7
	T	14	0	9	2	8
	P	.05	.02*	.05	.05	.05
Afternoon Class	N	8	6	7	2	5
	T	18	5	7	-	-
	P	.05	.05	.05	.05	.05

Legend:

N - The number of pairs of pre and post scores that differed.
T - The largest value (+ or -) of summed, ranked differences.
P - The probability that a T value as small as that obtained could occur by chance alone.
* - Indicates statistically significant change.
- - In the Wilcoxon T test, when the number of pairs of data which differ is less than N=6, a T value need not be computed. The degree of change is not significant.
- Symbol meaning greater than.

Summary: The pre-test distributions of scores differed appreciably from the respective maximum possible scores in only two areas, eye-motor coordination and form constancy. In all other areas (figure-ground perception, position in space, and spatial orientation) the twenty-fifty percentile (Q_1) scores were only one point below the total possible scores. With only a few exceptions all children had perfect or near perfect score in those areas.

In the two visual perceptual areas of appreciable pre-test deficiency, eye-motor coordination and form constancy, the children showed no significant progress. The only gain in visual-perception ability was in the area of figure-ground perception, made by the morning class.

Significance: Extensive training caused no meaningful change in areas of visual-perceptual/motor development. The effect that such training may have had on academic achievement is indeterminate, since there were too few Level I children to establish a control group which would have received no perceptual training. The data reinforce the fact that the Frostig Developmental Test of Visual Perception was inappropriate for the age level of the Learning Center children. It was chosen as an evaluation instrument because no other test was available which claimed age-level appropriateness, and had as great breadth of visual-perceptual measurement or ease of administration. Additional conclusions concerning perceptual-motor training are included in the Implications section of this report.

Progress in Basic Reading Skills: Distributions and ranges of pre and post-test scores on the Gates-McKillop Diagnostic Reading Test, Part V, varied widely between areas, and between levels of classes. These results are presented in Table 9.

TABLE 9. Summary of descriptive data, Gates-McKillop Reading Diagnostic Test, Part V.

		Word Parts		Letter Sounds		Capital Letters		Small Letters	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Level I	Q3	3	10	23	24	25	26	25	26
Morning	Md	1	1	21	22	24	26	24	26
	Q1	0	0	15	20	24	25	22	23
	Range	0-12	0-18	9-24	19-26	19-26	18-26	19-26	20-26
	Percent with Expected Score	8	17	50	25	25	67	25	67
	Q3	12	11	25	25	26	26	26	26
Afternoon	Md	8	9	24	24	25	26	25	26
	Q1	0	0	23	22	25	26	25	26
	Range	0-18	0-17	20-26	22-25	24-26	-	24-26	25-26
	Percent with Expected Score	20	0	80	50	50	100	50	90
Level II	Q3	14	18	24	25	26	26	26	26
Morning	Md	3	14	24	25	26	26	26	26
	Q1	1	11	22	24	26	26	24	26
	Range	0-19	6-22	18-25	20-26	23-26	25-26	22-26	22-26
	Percent with Expected Score	27	36	18	36	82	91	64	82
	Q3	20	22	25	26	26	26	26	26
Afternoon	Md	14	18	23	26	26	26	26	26
	Q1	1	1	22	25	26	26	26	26
	Range	0-22	1-22	21-26	24-26	25-26	25-26	-	24-26
	Percent with Expected Score	67	33	44	89	89	89	100	89

Table 9..(Cont.)

Secondary

	Word Parts		Letter Sounds		Capital Letters		Small Letters	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Q_3	11	15	22	24	26	26	26	26
Md	5	10	20	23	26	26	25	26
Q_1	0	1	15	21	25	26	24	26
Range	0-22	0-22	4-26	17-25	21-26	25-26	23-26	25-26
Percent with Expected Score	0	0	4	0	72	84	48	88
Total Possible	23		26		26		26	

Legend:

Q_1 - First quartile score
Md - Median Score
Q_3 - Third quartile score

To determine if phonetic word attack skills were significantly deficient at the outset of the program, the Kolmogorov-Smirnoy test was applied to the Gates-McKillop Reading Diagnostic Test, Part V-1, for all groups. These data are presented in Table 10. Obtained pre-test scores were compared to theoretically expected score for the regular school grade level of each student, based on the assumption that he should theoretically be reading at grade level.

TABLE 10. Summary of Kolmogorov-Smirnoy tests comparing pre-test scores on the Gates-McKillop Reading Diagnostic Test, Part V-1, with theoretically expected scores.

	Level I		Level II		Secondary
	A.M.	P.M.	A.M.	P.M.	
D max.	.73	.36	.70	.14	.92
P	.01*	.05* .10	.01*	.20	.01*

Legend:

D max. - The largest difference between observed and expected frequencies of scores falling within predetermined ranges, divided by the number of examinees.
P - The probability that a D max. as large as or larger than that obtained could occur by chance alone.
- Symbol meaning "less than."
- Symbol meaning "greater than."
* - Indicates statistical significance.

Wilcoxon matched-pairs signed-ranks T tests were used to analyze growth in word attack skills, and knowledge of letters and letter sounds. Results of the Wilcoxon T tests are summarized in Table 11.

TABLE 11. Gates-McKillop Reading Diagnostic Tests, Parts V, summary data of comparisons of pre and post-test scores using Wilcoxon T tests.

	Level I						Level II						Secondary		
	Morning			Afternoon			Morning			Afternoon					
	N	T	P	N	T	P	N	T	P	N	T	P	N	T	P
Part V-1 Word Parts	10	5	*02	8	18	.05	11	0	*01	8	10	.05	19	35	*01
Part V-2 Letter Sounds	10	8	*05	7	11	.05	9	9	.05	7	0	*02	24	31	*01
Part V-3 Capital Letters	8	3	*02	X	X	X	X	X	X	X	X	X	X	X	X
Part V-4 Small Letters	7	0	*02	X	X	X	X	X	X	X	X	X	12	9	*01

Legend:

N - The number of pairs of pre and post-test scores that differed.
T - The largest value (+ or -) of summed, ranked differences.
P - The probability that a T value as small as that obtained could occur by chance alone.
* - Indicates statistical significances.
- Symbol meaning "greater than."
X - Denotes areas in which no appreciable deficiences existed at the beginning of the program. Almost all students in the groups indicated by X's attained expected or perfect scores on subtests in question.

Summary: All classes were initially deficient in two of the four basic reading skill areas, phonetic word attack and knowledge of letter sounds. The Level I morning class was also deficient in naming capital and small letters.

The Level I morning class made appreciable gains in all areas - word parts (phonetic word attack), letter recognition (both capital and small letters), and letter sounds. In the Level II elementary program, the morning class made gains in phonetic word attack, and the afternoon class gained in knowledge of letter sounds. The secondary students progressed significantly in areas of pre-test deficiency. However, the Level I afternoon class showed no statistically significant change in the two areas in which initial deficiencies were evident.

Significance: Learning Center students have made significant progress in basic reading skills after long histories of failure. Reasons for the lack of significant gains in one class are unknown.

Reading and Arithmetic Achievement: Metropolitan Achievement Test results are summarized in Table 12. Means, standard deviations, and grade placements equivalent to the respective means are given in Standard scores in addition to ranges and distributions. Table 13 shows the average number of months progress made by each class in each reading related area. As a later analysis in this report will show, some students achieved far beyond the class average, while others made little measurable progress.

TABLE 12. Summary of descriptive data, Metropolitan Achievement Tests.

Level I	Word Knowledge		Word Discrimination		Reading		Spelling		Arithmetic CComputation		Arithmetice Prob. Solving	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Mean	40.2	44.9	41.9	46.9	38.3	42.9	39.9	44.9	52.0	55.4	51.5	54.4
Grade Equivalent	2.2	2.6	2.3	2.7	2.0	2.4	2.1	2.4	*	*	*	*
Standard Deviation	6.19	8.97	7.28	5.89	7.92	6.34	8.75	6.68	11.25	11.77	7.50	6.96
Q_3	45	49	46	51	42	47	45	50	58	67	54	61
Md	40	47	42	46	39	41	40	46	54	54	50	54
Q_1	36	39	38	42	33	40	34	39	46	48	47	49
Range	29-54	24-62	23-58	37-58	23-60	29-62	28-52	30-54	31-71	31-71	35-67	41-67
Level II												
Mean	48.6	53.6	48.0	53.1	46.4	52.0	48.1	53.6	64.4	65.1	58.2	60.9
Grade Equivalent	2.9	3.3	3.0	3.6	2.8	3.5	2.7	3.6	*	*	*	*
Standard Deviation	5.86	8.00	5.59	6.44	5.24	6.99	5.86	6.42	17.65	11.31	9.18	8.97
Q_3	53	59	51	55	49	54	52	57	67	71	66	67
Md	49	56	46	53	46	52	48	55	63	67	54	61
Q_1	43	48	45	48	43	46	45	50	58	58	50	58
Range	33-60	35-63	35-61	39-68	37-58	35-64	36-58	37-65	40-76	46--80	46-77	43-77

TABLE 12. (Cont.)

Secondary	Word Knowledge		Word Discrimination		Reading		Spelling		Arithmetic Computation		Arithmetic Prob. Solving	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Mean	40.5	43.7	35.9	39.6	38.6	43.2	38.5	40.9	51.6	53.5	44.9	46.8
Grade Equivalent	5.6	6.1	2.6	2.9	5.2	6.0	5.9	6.1	8.3	8.7	7.3	7.7
Standard Deviation	7.77	8.62	8.28	8.94	7.89	77.82	5.29	6.34	17.10	16.26	13.52	14.34
Q_3	45	51	43	47	45	48	43	44	71	67	54	58
Md	41	44	39	44	40	43	39	40	46	50	43	44
Q_1	36	38	30	33	32	37	36	36	37	39	34	32
Range	22-52	22-57	19-49	26-52	21-51	29-64	29-48	29-55	27-79	27-81	23-73	26-73

Legend:

Q_1 - First quartile score

Md - Median score

Q_3 - Third quartile score

* - Indicates grade equivalents not given

Note: All data is based on standard scores.

TABLE 13. Average class progress in reading areas measured by the Metropolitan Achievement Tests.

		Word Knowledge	Word Discrimination	Reading	Spelling
Level I	A.M.	3	4	3	3
	P.M.	4	5	3	6*
Level II	A.M.	7*	6*	6*	11*
	P.M.	5	8*	6*	7*
Secondary		3	5	8	

Note: All entries are in months.

An asterisk in Table 13 indicates that at least normal progress was made in that area. The expected normal rate was one month for each month of school. The interval between pre and post-testing, October to May, was slightly over six months.

Tables 14, 15, and 16 present data summarizing the statistical comparisons of all six areas of the pre and post Metropolitan Achievement Tests. Statistically significant progress at at least the .05 level pf probability was made by both Level I classes, the morning Level II elementary class, and the secondary classes in all areas of reading and in spelling. The Level II afternoon class advanced significantly in word knowledge and spelling, although gains in the other two reading areas were also significant if a .10 level of probability is accepted.

None of the pre and post-test differences in the two arithmetic areas were significant. However, the secondary students did gain appreciably in arithmetic problem solving and concepts with a probability level of significance between .10 and .05.

Summary: All Learning Center classes improved significantly in the areas of reading and spelling. Gains in arithmetic were not significant.

Significance: See subsequent section on Expected Academic Growth.

Table 14: Comparison of pre- and post-test Metropolitan Achievement Test data using Student's t Test, Level I program.

LEVEL I		Pre-Test Mean	Post-Test Mean	Mean Diff.	t	Probability Level
Morning	WK	36.82	41.36	4.55	2.51	$.02 < P < .05$*
	WD	39.08	44.08	5.00	4.13	$P < .01$*
	R	34.50	40.67	6.17	2.98	$.01 < P < .02$*
	S	37.27	41.55	4.27	3.03	$.02 < P < .01$*
	AC	48.17	49.67	1.50	1.21	$.20 < P < .30$
	APS	48.82	52.36	3.54	1.95	$.05 < P < .10$
After-noon	WK	44.00	48.80	4.80	3.72	$P < .01$*
	WD	45.30	50.30	5.00	4.07	$P < .01$*
	R	42.90	45.60	2.70	2.29	$.02 < P < .05$*
	S	42.90	48.60	5.70	4.29	$P < .01$*
	AC	56.60	62.20	5.60	1.32	$.20 < P < .30$
	APS	54.40	56.60	2.20	1.65	$.10 < P < .20$

All data are based upon Standard Scores

* Indicates statistically significant gain.

Table 15: Comparison of pre- and post-test Metropolitan Achievement Test data using Student's t Test, Level II Elementary Program.

LEVEL II		Pre-Test Mean	Post-Test Mean	Mean Diff.	t	Probability Level
	WK	50.42	56.42	6.00	3.47	$P < .01$*
Morning	WD	48.25	52.75	4.50	3.75	$P < .01$*
	R	46.25	52.25	6.00	4.23	$P < .01$*
	S	48.88	55.50	6.63	4.67	$P < .01$*
	AC	61.13	58.13	3.00	0.92	$.30 < P < .40$
	APS	54.38	58.25	3.88	1.32	$.20 < P < .30$
	WK	46.30	50.20	3.90	1.88	$.05 < P < .10$ (close)
After-noon	WD	47.60	53.40	5.80	3.39	$P < .01$*
	R	46.60	51.70	5.10	2.25	$.05 < P < .10$(close)
	S	47.50	52.10	4.60	3.93	$P < .01$*
	AC	67.00	70.70	3.70	1.69	$.10 < P < .20$
	APS	61.20	63.00	1.80	0.54	$P \approx .30$

Table 16: Comparison of pre- and post-test Metropolitan Achievement test data using Student's t Test, Secondary program.

Secondary	Pre-Test Mean	Post-Test Mean	Mean Diff.	t	Probability Level
WK	40.52	43.65	3.13	3.48	$P < .01$*
WD	35.89	39.58	3.68	2.54	$.02 < P < .05$*
R	38.62	43.17	4.55	3.99	$P < .01$*
S	38.48	40.86	2.38	3.35	$P < .01$*
AC	51.59	53.48	1.89	1.13	$.20 < P < .30$
APS	44.85	46.78	1.93	1.95	$.05 < P < .10$(Close)

TABLE 17. Academic growth rate indices based on Metropolitan Achievement scores. Elementary students only.

Word Knowledge		Word Discrimination		Reading		Spelling	
IGR	LC	IGR	LC	IGR	LC	*IGR	LC
1.2	5.0	1.2	.7	1.6	12.0	1.2	0.
.6	1.7	.7	.8	.6	4.0	5.5	1.0
.6	-2.3	.5	3.3	.6	2.3	1.1	- .5
.68	1.9	.6	.5	.6	2.0	.5	1.8
.08	.5	.2	- .3	.2	1.9	.3	1.7
.1	1.7	.1	2.7	.2	1.7	--	--
.2	- .3	.1	2.3	.1	1.7	0.	2.0
.3	1.1	.2	1.2	.2	1.4	--	--
.3	1.0	.4	.3	.6	1.3	.5	3.0
.5	.8	.5	0.	.6	1.2	.5	2.4
.3	1.2	.5	1.2	.5	1.2	.6	1.4
.5	.8	.3	1.4	.5	1.1	.3	.5
.3	1.0	.5	- .1	.4	1.0	.2	1.3
.5	2.2	.6	- .3	.6	.9	1.0	1.8
.7	.5	.8	.8	.5	.9	1.0	- .3
.6	3.2	.8	- .5	.6	.9	.7	.5
.3	.2	.4	.9	.4	.8	.2	1.4
.3	.8	.3	0.	.2	.8	.3	.8
.2	.3	.1	.3	.2	.8	0.	1.1
.3	.5	.5	.8	.2	.8	.2	1.1
.2	.3	.2	.5	.08	.8	--	--
.4	1.5	1.0	2.3	.5	.8	.6	.5
.6	2.0	.6	.8	.7	.8	.4	1.7
.5	1.5	.7	.5	.4	.8	.4	2.2
.3	1.5	.2	2.5	.3	.8	--	--
.5	- .2	.5	1.2	.4	.8	.3	1.8
1.0	3.0	1.0	4.0	.7	.7	1.0	5.0
.2	2.7	.2	2.3	.2	.7	.2	.3
.2	.0	.2	.5	.2	.6	.2	0.
.5	.8	.5	2.3	.5	.6	.5	1.8
.3	1.2	.4	.5	.4	.6	--	--
.2	.8	.3	- .5	.2	.5	.3	- .2
.5	- .5	.2	1.4	.2	.5	.2	.6
.3	1.2	.2	1.1	.2	.5	--	--
.6	2.0	.5	0.	.6	.5	.6	.3
.7	2.2	.6	1.4	.6	.3	.6	.9
.5	1.9	.5	.9	.4	.3	.4	.5
.3	.5	.4	.6	.3	.3	.2	.8
.4	.5	.4	1.9	.3	.2	.5	.9
.3	.3	.2	- .3	.4	0.	.2	.3
.5	- .5	.7	.8	.3	- .2	.3	.6
.6	.2	.8	.5	.6	- .2	.5	.3
.4	1.3	.4	1.2	.5	- .6	.4	1.7
.3	- .7	.4	0.	.3	- .8	.4	-1.2
.4	0.	.6	1.2	.5	- .8	.5	.9
.6	-1.3	.7	0.	.6	-2.3	.6	1.8

Legend: IGR - Initial growth rate
LC - Growth rate while attending the Learning Center

* Previous test data not available, IGR based on Learning Center pre-test and may be spuriously low in some cases. This is true for a few students in the other three measurement areas also.

TABLE 18. Comparison of post-test Metropolitan Achievement Test scores with expected scores using student's "t" test, Level I program.

Level I		Post-test Mean	Expected Mean	Mean Difference	t	Probability Level
A.M.	WK	41.92	44.75	2.83	1.43	.10<P<.20
	WD	44.08	45.17	1.08	.72	.40<P<.50
	R	40.67	42.42	1.75	1.11	.20<P<.30
	S	41.55	43.09	1.55	1.16	.20<P<.30
P.M.	WK	48.80	49.80	1.00	.69	.50<P<.60
	WD	50.30	50.60	.30	.24	.70<P<.80
	R	45.60	48.90	3.30	3.79	P<.01 *
	S	48.60	48.70	.10	.01	P>.90

TABLE 19. Comparison of post-test Metropolitan Achievement Test scores with expected scores using student's "t" test, Level II elementary program.

Level II		Post-test Mean	Expected Mean	Mean Difference	t	Probability Level
A.M.	WK	56.00	56.64	.64	.46	.60<P<.70
	WD	53.00	54.84	1.82	2.17	.05<P<.10 *
	R	51.73	53.91	2.18	1.57	.10<P<.20
	S	54.57	54.14	.43	.28	.70<P<.80
P.M.	WK	49.85	50.23	.38	.19	.80<P<.90
	WD	51.69	51.08	.62	.37	.70<P<.80
	R	50.69	50.00	.69	.38	.70<P<.80
	S	52.58	51.58	1.0	.71	.40<P<.50

TABLE 20. Comparison of pre and post-test Metropolitan Achievement Test data using student's "t" test, Secondary Program

Secondary	Post-test Mean	Expected Mean	Mean Difference	t	Probability Level
WK	43.50	45.07	1.57	1.51	.10<P<.20
WD	41.18	43.41	2.24	1.42	.10<P<.20
R	43.31	43.86	.55	.56	.50<P<.60
S	41.23	43.15	1.92	2.40	.02<P<.05 *

Summary. The elementary children as a group made significantly faster progress while at the Learning Center than in their previous school experience.

Significance. See following section on Expected Academic Growth.

Expected Academic Growth: One additional type of analysis was done to give further meaning to the academic gains. Using the pre-test scores as a baseline of academic functioning, expected post-test scores were determined from the Metropolitan Achievement Tests' norms tables, based on an expected academic growth rate of one month for each month at the Learning Center. Statistical comparisons of post-test scores with theoretically expected end-of-program scores are summarized in Tables 18, 19, and 20.

Using a conservative probability level of significance of .10, the obtained post-test scores differed significantly from the theoretically expected scores in one area in each of three classes: Level I afternoon, Reading, Level II morning, Word Discrimination, and Secondary, Spelling.

Summary: In almost all areas of reading skills measured by the Metropolitan Achievement Tests, actual academic gains were commensurate with theoretically expected gains.

Significance. It is particularly noteworthy that all Learning Center classes made significant gains in all reading areas, that most students' academic progress was faster than it had been previously, and that the students learned essentially as much as any student would have been expected to learn in the same period of time. However, most students were still functioning below grade level.

Note also that the Level I students made significant and meaningful progress in all reading areas, in spite of the fact that few changes in perceptual/motor functioning were observed. This latter point will be treated more fully in the conclusions section of this report.

Academic Growth Rate: Academic progress, although statistically significant, gains greater meaning if viewed in the perspective of the period of time involved, particularly when compared to some previous rate of progress. To make this comparison, two academic growth indices were computed for each Learning Center student in the elementary grades.

The first possible stable measure of academic achievement was desired to ascertain each child's baseline rate of academic growth - the rate at which he progressed in his first few years of school. The third grade was chosen as the earliest desirable grade level because group tests in grades one and two usually yield scores which are, for a variety of reasons, statistically less reliable. Thus, the initial growth rate (IGR) was based on the student's academic progress through the third grade. The Learning Center growth rate (L.C.) was, of course, based on academic progress at the Learning Center. Table 17 presents these academic growth rate indices for the four reading related areas of the Metropolitan Achievement Tests.

These growth indices were calculated simply by dividing the number of months of academic progress, as measured by the Metropolitan Achievement Tests, by the number of months it took the child to achieve the gain.[1] Thus, a child with a growth index of 1.0 has made expected progress. He has gained one "academic month," for each month in school. A growth index of .5 indicates a rate of progress of only a half a month's learning, so to speak, for each month in school. Growth rates may also be viewed in terms of years. One year and four months progress for every year in school yields a growth rate index of 1.4, etc.

Progress of the secondary students was not analyzed in this manner. Initial growth rate indices for students in that grade range would be spuriously deflated due to the long period of years during which the student's reading progress was, in most cases, essentially static. Learning Center growth indices would be spuriously inflated due to the inappropriateness of the measuring instrument to be used in a manner other than short term comparisons.

Initial growth rate indices reveal that only 15% of the students were making normal, expected progress over their first three years of school in at least one area measured. Of course the needs of individual children varied in degree upon entering the Learning Center, and therefore, advancement at the Learning Center was not consistent for all the children as a group. Some progressed in Word Knowledge or Word Discrimination, others in Reading per se, and others in Spelling. Many made significant gains in more than one area. Eighty percent of the students progressed significantly in at least one reading area - Word Knowledge, Word Discrimination, Reading, or Spelling. By "significant progress" it is meant that while attending the Learning Center, students made gains at least at the expected rate of one month for each month in school, compared to previously learning at greatly deficient rate.

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[1] Method taken from Stella M. Cohn, "Upgrading instruction through special reading services," *The Reading Teacher*, March, 1965.

CHAPTER IV

IMPLICATIONS

Summary of Implications

1. The specific program objectives should be stated in operational terms.

2. An evaluation design should be selected that measures stated objectives.

3. Future programs should budget money to provide substitutes to release classroom teachers to observe the special program.

4. Visitors should clearly define their purposes for observing the Learning Center program before visiting.

5. Each volunteer should have a personal interview and pre-service orientation. They should be assigned when staff express need for classroom assistance. They should not be placed without staff request.

6. Volunteers should be encouraged to aid in the preparation of teaching materials, and to provide individual instruction to students under the supervision of certificated staff.

7. In-service courses of the workshop type may be of greater benefit to participants than lecture courses, when dealing with instructional materials and methods.

8. Consultant services may be of greater value if incorporated into workshop planning sessions.

9. Students attending a special program part-time should return to their regular school for the remaining part of the school day. Some exceptions might be made, depending on the needs of individual children.

10. Close intercommunication between special program teachers and students' regular teachers is important when pupils attend two schools.

11. Students will have to make gains above normal expectancy to enable them to return to their regular classroom and continue with their peers.

12. Perceptual motor training may have limited benefit for children in the upper elementary grades. An evaluation of this treatment should be continued.

13. Although no student should be excluded from the program due to transportation difficulties, many problems would be alleviated by parents providing their own childrens' transportation to and from the clinic school. Special arrangements should be planned and budgeted for hardship cases.

14. Caution should be exercised in the purchase of expensive equipment--one-of-a-kind purchases on a trial basis for evaluation of effectiveness is suggested.

15. It is desirable to employ experienced personnel with special training in exceptional children. If unable to assign personnel with specialized preparedness, then on-the-job training should be provided.

Evaluation

A clear and precise evaluation design should be written into the funding proposal for any program of this type. This is suggested not only for the benefit of the funding agency, but primarily to ensure detailed planning of the entire project during the proposal stage of project development. A detailed evaluation design is dependent upon a clear statement of specific program objectives in operational terms, and in as much detail as possible. For example, an objective should not be stated as "to remediate deficiencies of the academically deprived," but more explicitly "to accelerate the progress of academically deficient students in areas of reading, with the ultimate goal of grade level functioning of the student in his regular classroom." Even this latter statement is general, and must be delineated further by subobjectives such as the teaching of phonetic word attack skills. Only after specific definitions of objectives have been formulated, can the evaluation team know what is to be measured, and select or develop evaluation instruments.

If the project is complex, as most are, early planning becomes paramount to the development of sound evaluation design and procedures. There may be no measurement instrument appropriate to specific project evaluation needs. This is particularly true when attempting to measure changes in motivation or attitude. If evaluation instruments are locally developed, time should be allowed for a pilot trial of such measuring devices with both "normal" students in the age-grade range of the project student population, and a-typical students like those for whom the project is designed. Three things should be gained by pilot test trials: The instrument may be refined and upgraded; some assessment of the validity and reliability of the instrument can be made (if only a non-statistical, objective appraisal); and some baseline data can be obtained to determine, to some extent, what scores might be "normally" expected, even if data is insufficient to establish local norms.

Diagnostic testing for student screening and placement is very time consuming. It should be started as soon after the formulation of the program as possible. If a control group is to be utilized in evaluating the effectiveness of the project, many more eligible students will have to be identified than can be placed in the program. Students should then be selected for the program at random from the eligible list. The control group would then consist of those students who were not selected for the program.

Due to planning time constraints, no control groups were incorporated in the design for the evaluation of the Learning Center. Therefore, no data was gathered to determine the relative effects of class size, teaching methods, special school setting, or type of primary difficulty postulated on the basis of diagnostic test results. It would have been desirable to have the following control groups: slow learners in full size regular school classes, a few in each of several classes; regular school classes of twelve slow learners each, using regular teaching methods; and regular school classes of twelve slow learners each, using the same teaching methods as used in Learning Center classes.

Had classes been comparable in terms of length and severity of student deficiencies, it would have been interesting to study the differential effectiveness of some of the divergent theoretical approaches to teaching the academically deficient child. If research of this type is to be done, contingent provisions, such as comparability of classes, must be incorporated into the initial program planning and the evaluation design.

Tests and Measurements

Students with gross learning problems often are so threatened by the school setting that their motivation is either consistently low or varies widely within short periods of time. This fluctuation in student motivation poses a serious dilemma in terms of the selection and use of measurement instruments in the project evaluation.

Standardized group achievement tests are very threatening to most academically deficient children. Some of these students may try hard to do their best throughout the test. Others may give up as soon as they encounter some difficulty. Obviously, the reliability and validity of such test scores may be seriously affected. The extent of such effects cannot be known, but beginning of program test scores are probably spuriously deflated. If the special instructional program increases motivation and decreases the threat value of the setting, then post-test scores may be truer measures of the student's ability. However, the difference in pre- and post-test scores would then suggest a greater amount of academic progress than that which actually occurred. The tests to this extent would be measuring performance, not learning.

It should not be assumed, however, that the use of standardized achievement tests is of no value. Appreciable value lies in the ability to relate the student's academic performance to grade placement norms. The important point is that caution must be used when interpreting test scores and performance changes. It may be advisable to also incorporate diagnostic achievement tests into the evaluation procedure.

Academic Growth

Upon entering the Learning Center, the two elementary groups tested at an average reading grade placement of beginning second and end of second grade, respectively. Length of instruction between tests was slightly more than six months. In the reading areas emphasized, the groups gained five and six months respectively. Secondary students were initially reading at the beginning fifth grade level. They gained an average of eight months during the instruction.

In basic reading skills, significant improvement was made in the areas of phonetic word attack and knowledge of letter sounds. Most students made faster academic progress at the Learning Center than previously. All classes made significant gains in all reading areas measured by the Metropolitan Achievement Tests. Students academic progress was commensurate with the normal expected progress. However, most students were still functioning below grade level.

Remedial Instruction

One service which was limited because of lack of time was intercommunication between the Learning Center teacher and the regular classroom teacher. This was also true in cases where students returned to full-time attendance at the regular school.

In a remediation program it is important for the clinic teacher and the student's regular teacher to agree on the basic goals and the level of functioning that can be realistically expected of the student. Initial lack of communication did propagate a situation in which the step-by-step program success at the Learning Center was undermined by unrealistic expectation in the regular school class.

It also was desirable for the regular school teacher to observe the student as he functioned in the clinic school in order to gain a greater appreciation of what the student can achieve in a less threatening environment and with motivational and teaching techniques tailored to the student's needs. Frequent conferences between the two teachers would have insured continued mutual support between the two programs.

Perceptual-Motor Training

In spite of extensive perceptual-motor training of elementary students at the Learning Center, no significant changes occurred in visual-perceptual ability. Students exhibited initial difficulty in eye-motor coordination and form constancy, and were still deficient in these areas at the end of the period of instruction. Alternate conclusions which might be drawn are: (1) The perceptual-motor training methods used were ineffectual. (2) The students were past the age at which they could still profit by such training. (3) The inappropriateness of the age level of the test led to inappropriate conclusions - low scores attained by students above the ceiling age of the test (8 years) may not indicate perceptual deficiencies, but perhaps errors due to frustration or inattention. (4) If perceptual deficiencies actually existed, the Learning Center students may have compensated for them in other ways. The effect that such training may have had on academic achievement is indeterminate.

Students Returned to Regular School

Nine students were returned to full-time regular school classes because it was judged that they could function adequately without further support from the clinic school. Subsequent reports from their regular school teachers varied. Some students needed special attention and modified daily lessons in some subject matter. However, it appears that most students adjusted very well, and are functioning at the level and rate of the regular class.

In spite of the academic progress of each of the Learning Center students, the fact remained that normal school progress, although a great accomplishment for these children, was not enough. It was those students who made better than average progress who achieved sufficiently to be returned to regular classrooms.

Consultants

An effort was made to invite specialists in many areas and, in some cases, with conflicting points of view to share with the Learning Center staff their experience and expertise. Generally, the consultant spent the morning in classes, observing the program in operation, and the afternoon in meeting with the clinic staff. The clinic staff profited greatly from such consultant services, and many adaptations and changes resulted from advice and experiences of consultants.

However, our experience suggests that a workshop-type of consultant service would be of greater value. Pre-planning during the summer before the Learning Center program is in operation, instead of while it is in operation, could solidify the program objectives.

Learning Center Observations

Since observation at the Learning Center appears to have had significant effect on the understanding of problems of children with learning disabilities, it is recommended that future programs budget money to provide teacher-released time.

Teachers from the local district and surrounding areas did visit the clinic by making the following special arrangements:

1. Teachers combined classes, allowing each to visit on alternate days.
2. Principals taught classes, thus releasing teachers.
3. Primary teachers on flexible scheduling combined classes and visited for a two-hour period either in the morning or afternoon.
4. Teachers conferenced with clinic staff after school hours.

Visitors to the Learning Center stated it was very beneficial for both teachers and administrators and that it had influenced their future curriculum and program planning. Many of the materials and methods which they had seen demonstrated would be employed in future programs.

Materials

Many visitors and in-service participants expressed the belief that methods and materials used at the Learning Center could not readily be applied in large groups. It is true that techniques for teaching the child who has failed to learn by conventional methods are predicated on a one-to-one or small group instruction. In many school districts, small classes may be impractical and such cases may make it necessary that the classroom teacher organize the school day so time is available for her to work with her few slow learners in a small group.

One of the purposes of offering observation opportunities to teachers is to help them gain insight into ways to adapt instructional materials or methods for particular children. Teacher-made materials for specific learning tasks are often more appropriate than costly commercial materials.

Volunteers and other auxiliary personnel in schools can assist teachers by making instructional aides, using inexpensive school supplies, providing that the teacher recognizes that some children in class need manipulative, concrete materials before advancing to more abstract standard textbooks.

Professional Advancement

Participants in the in-service training courses felt that they could have gained more if the course had incorporated demonstrations and actual applications of methods and materials. They felt that a workshop-type of in-service course would be more beneficial than the lecture course.

From the teacher participants' comments, it was apparent that their hopes were to get immediate answers to particular problems of children in their classrooms. Their expectations reflected their lack of awareness and knowledge of the complexities of learning problems.

A workshop in-service program is being planned for Fall, 1967, with emphasis on development of materials and demonstrations of techniques with students.

The in-service training courses appear to have been very successful in teaching remedial techniques, and in effecting more positive teacher attitudes toward children with learning difficulties. Most teachers indicated they had actually introduced some of the suggested methods for slow learners in their classrooms.

Teacher Opinion on Students' Improvement

The Learning Center staff was asked informally to identify change, if any, in students' behavior, study skills, and academic achievement. This was in addition to the specific structured questionnaire on which the teachers each ranked individual students' attitude and behavior. Interestingly, when teachers evaluated students' growth in a general way, instead of rating individuals, their comments and opinions were far more positive than in their structured responses.

Level I elementary group were seen as having changed in the following ways:

1. Had gained in ability to listen and attend.
2. Can now participate in group activities and instruction--at first could not.
3. Improved in letter-sound relationship.
4. Are able to sound out words.
5. Growth in self-image.
6. Can share ideas and take part in group discussions.
7. Have improved in balance and orientation in space.
8. Marked improvement in handwriting.
9. Able to recognize frequently used words.
10. Improved in ability to dictate meaningful sequential stories and stick to the point.
11. Showing interest in books and a desire to read.
12. Can communicate with peers and adults.

Level II - Elementary

1. Improvement in behavior.
2. Less "acting out" when frustrated.
3. More able to interact in a positive way with other children.
4. Improvement in following directions.
5. Acceptance of classroom routines.
6. More ability to accept weaknesses, less defensive.
7. Able now to write own stories, instead of dictating.
8. Coordination and directionality improved.
9. Fear of printed word less.
10. Less threatened by change--can adjust to new situations.

Secondary program

1. Students' school performance in general had improved, not only in reading.
2. Students see themselves as students, and behave in that manner.
3. Improvement in coping ability when threatened or frustrated.
4. Aware that they are part of the school, entering into activities.
5. Better performance in regular school subjects.
6. Improvement in sense of worth.
7. Improved study skills and in working independently.
8. More positive attitude toward reading.
9. Reading for pleasure.

Teachers, aides, and volunteers felt that the students as a whole had made significant improvement in behavior, attitudes, self-control and in a positive self-image.

Parent Appraisal of Student Adjustment

Parents also perceive the Learning Center as having had many positive effects on their respective children's general attitudes, motivation and academic growth. They feel that their children like school more, read more, and appear happier and more self-confident.

Student Self-Appraisal

In a structured interview, the students indicated that the Learning Center program made positive changes in their motivation and attitudes. Most perceive school as being easier and feel that they are improving. They like school more and read more, both in school and at home.

APPENDIX

Consultants:

Throughout the operation of the Learning Center program, consultant assistance was provided by various scholars whose particular expertise contributed to the continuous appraisal of our objectives and practices.

Dr. Donald McNassor Professor of Education Claremont Graduate School	Parent Counseling Counseling of Students
Dr. Caro Hatcher Professor, Special Education California State College, Los Angeles	Multi-sensory Approaches to Learning Emphasis on the E. H. child (educationally and neurologically handicapped)
Dr. Harry Singer Associate Professor of Education University of California, Riverside	Reading Tests and Measurements Sub-strata Factor Theory of the Analysis of Reading Skills
Dr. Martin Covington Assistant Professor of Psychology University of California, Berkeley	Teaching Children Thinking Developed Through Reading
Dr. Jean Ayres Associate Professor of Education University of Southern California	Sensory Learning - particular emphasis on her research in the tactile area.
Dr. Robert Ruddell Associate Professor of Education University of California, Berkeley	Clinic Organization Remedial Reading Techniques Research in Reading
Dr. Malcolm Douglass Professor of Education Claremont Graduate School	Individualized Reading Self-Selection Reading Organization of Clinic Program Development of Language Arts Skills
Dr. Bruce Balow Professor of Education University of Minnesota	Clinic Program Techniques of Remedial Reading Diagnostic Procedures
Dr. Bryant Cratty Director of Perceptual-Motor Learning Laboratory University of California, Los Angeles	Movement and the Intellect Motor Learning Physical Fitness Hierarchy of Motor Skills in Sequential Maturational Development
Dr. John Regan Associate Professor of Education Claremont Graduate School and University Center	Linguistics and Language Development

DISSEMINATION OF INFORMATION

The Learning Center, as an exemplary model, was visited by representatives from thirty school districts. Most visitors were from the surrounding inland area, but some were from Northern California and out of state.

No. of Visitors	DISTRICT	No. of Visitors	DISTRICT
2	Alta Loma	4	Ontario
2	Alvord	1	Perris
2	Calimesa	1	Pasadena
6	Coachella	11	Rialto
20	Colton	80	Riverside Unified
15	Corona	2	Redlands
5	Cucamonga	8	San Bernardino
5	Desert Sands	4	San Jacinto
4	Downey	5	San Mateo
9	Fontana	4	Upland
8	Hemet	1	Ventura
4	Hesperia	4	Victor Valley
8	Imperial County	7	Yuciapa
1	Idylwild	4	State of Montana
7	Jurupa	1	State of Pennsylvania
4	La Sierra	1	State of Utah
13	Moreno Valley	1	Holland
		1	India
		8	O.E.O. Representatives
		35	P.T.A. Presidents
		2	U.S. Office of Education

MEASUREMENT INSTRUMENTS USED IN THE LEARNING CENTER EVALUATION

Standardized Measurement Instruments

Gates-McKillop Reading Diagnostic Test, Part V
  Knowledge of alphabet, letter sounds phonetic word attack

Frostig Developmental Test of Visual Perception
  Eye-motor coordination, Figure-ground perception, Form constancy
  Position in space (perception of rotations and reversals)
  Spatial relations (ability to copy designs accurately)

Metropolitan Achievement Tests; Primary, Elementary, and Advanced, Forms A and B. Word Knowledge, Word Discrimination, Reading, Spelling, Arithmetic Computation, Arithmetic Problem Solving and Concepts.

Non-Standardized Instruments Developed for The Learning Center Evaluation

Learning Center Visitor's Questionnaire

In-Service Training Participants Questionnaire

Learning Center Student Interview

Learning Center Parent Questionnaire

School and Classroom Adjustment Rating Inventory
  Academic application, General behavior, General attitude, Confidence-anxiety, Aggression-withdrawal, Total adjustment

The items of the School and Classroom Adjustment Rating Inventory were grouped into 5 subscales on the basis of face validity. Thus 6 scores were obtained. The items which load onto each subscale are listed below by number.

Academic Application: 1,2,3,4,5,6,7,8,9,28

General Behavior: 14,15,16,17,22

General Attitude: 10,20,21

Confidence/Anxiety: 11,12,13,18,19

Aggression/Withdrawal: 23,24,25,26

Item 27 was dropped from the analysis because it was too ambiguous, required too great a degree of subjective judgment, and did not seem to "fit" or load onto any of the 5 subscale categories.

No item analysis or factor analysis has been applied to the SCARI. The categories have face validity only, and the items have unknown discrimination indices for this population.

THE LEARNING CENTER
Riverside Unified Schools

Reading Tests

Bond - Clymer - Holt Developmental Reading Tests. Form D-A
Form IR-A
Form IR-B
Form U-B

California Reading Test, Inc., Form AA

Committee on Diagnostic Reading Tests, Inc., Form A

Dolch - Basic Sight Word Test

Doren Diagnostic Reading Test of Word Recognition Skills

Durrell Analysis of Reading Difficulty

Frostig Visual Perception Tests

Gates Basic Reading Test, Form LC
Form CS
Form RV

Gates Reading Survey Test, Form MI

Gates - McGinitie Reading Test. Primary A, Form I
Primary A, Form II
Primary B, Form II
Primary C, Form II
Primary CS, Form I
Primary CS, Form II

Gates - McGinities Reading Tests. Survey E, Form I
Survey E, Form II

Gates - McKillop Reading Diagnostic Tests, Form I, Survey E
Form II, Survey E

Gilmore Oral Reading Test, Form A and Form B

Ginn Informal Reading Inventory

Gray Oral Reading Test, Form A

Gray - Standardized Oral Reading Paragraph Test

Jastak - Wide Range Achievement Test

McCall Crabb - Standard Test in Reading

Metropolitan Achievement Tests, Elementary, Form A
Elementary, Form B
Primary I, Form A
Primary I, Form B
Primary II, Form A
Primary II, Form B
Intermediate (complete), Form A
Intermediate (complete), Form B
Advanced, Form A
Advanced, Form B

Mills, Learning Methods Test

Monroe - Diagnostic Reading Examination

Morrison - McCall Spelling Scale

Phonics Knowledge Survey, Delores Durkin

Singer, Dr. Harry - Language Perceptual Tests, Form A, Series E - J

Spache - Diagnostic Reading Scale

Stanford Diagnostic Reading Test, Level I and Level II

Templin-Darley Test of Articulation

Wepman - Auditory Discrimination, Form II

The Learning Center
Riverside Unified Schools

Psychological Tests

Ayres Perceptual Test Battery

Examining for Aphasia

Gessell Developmental Schedules, Specim$\overset{e}{\text{a}}$n Set

Golstein-Scheerer Object Sorting Test
- Color Form Test
- Color Sorting Test
- Stick Test
- Cube Test, Forms I-VI, VII-XI

Goodenough-Harris Drawing Test

Harris Test of Lateral Dominance

Hooper Visual Organization Test

Illinois Test of Psycholinguistic Abilities

Leavell Language Development

Peabody Picture Vocabulary, Form A, Form B

Porteus Maze Test

Raven Progressive Matrices, Form 1947, Sets A, AB, B

Rorschach

Shneidman - Make a Picture Story Test

Stanford-Binet Intelligence Scale, Form L-M

Symonds - Picture-Story Test

Thematic Apperception Test

Vineland Social Maturity Scale

Wechsler Intelligence Scale for Adults

Wechsler Intelligence Scale for Children

Winter Haven Test of Visual Perception

LEARNING DISABILITIES CENTER

RIVERSIDE UNIFIED SCHOOLS

Date______________

Descriptions of Student Eligibility

Students selected to attend the clinic will be those whose severe learning disabilities cannot be remediated by the usual approaches employed in the classroom or special reading room.

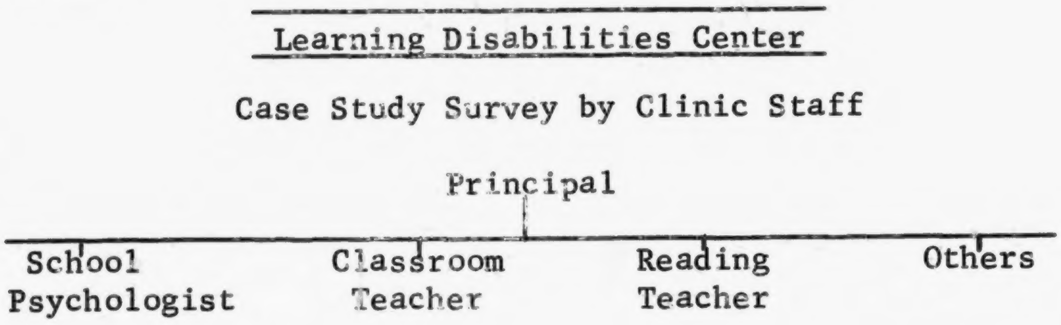
Since focus will be on the diagnosis, analysis, and correction of learning disabilities, students having concurrent problems of intense emotional disturbance, physical handicap, or mental retardation will be referred to a placement committee for assignment to a program suitable to their needs.

Recognizing that causes of learning disabilities may be multifactored, eligibility will be determined on a "case study" approach.

A student will be admitted after careful assessment when it appears that the services of the Learning Disability Center are the most appropriate for his rehabilitation.

Referral Procedure

Students identified by the classroom teacher, reading teacher, school psychologist or other school personnel as needing special instructional help, should be referred through the principal for attendance at the Learning Disabilities Center. Admission will be determined after a case study survey by the clinic staff.



Request for Admission

Request for admission is made by completing the application form.

3-30-66

LEARNING CENTER

RIVERSIDE UNIFIED SCHOOLS

ELEMENTARY APPLICATION FOR ADMISSION

Date____________

Name________________________________Birthdate__________Grade__________M or F

Address____Phone________________

Parent or Guardian____

School Attending__________________________Teacher_____________________________

Briefly state student's learning difficulties:

School History

If student has ever been retained, state grade.

Was retention effective? Describe.

Has student had special help in reading? (By whom, date, results)

List other referrals and dates of request. If an individual intelligence test has been given, indicate date and results.

Test Scores

(List pertinent test results from cumulative record. Include all scores obtained from each test within the last three years.)

Date Taken	Grade	Name of Test	Form	Scores

Principal's Signature_________________________________

10-14-66

Application for Admission
Part 2

(Pupil's Name)	(Teacher's Name)	(School)

Profile of Individual Behavior

(Check those items which most nearly describe student)

Social and Emotional Adjustment

Positive attitude toward school	Dislikes school
Cooperative, wants to learn	Uncooperative
Attentive, stays with task	Inattentive, gives up easily
Works well in group situations	Cannot work with others
Follows directions	Confused, does not follow direc.
Calm, seldom upset	Hyperactive, restless
Cheerful	Overly sensitive
Industrious	Easily discouraged, lacks perseverance
Able to concentrate	Easily distracted
Has self control	Aggressive, abrupt, volatile
Has concern for others' feelings	Inconsiderate
Friendly, likeable	Often hostile to others
Responsive to class decisions	Unresponsive to others' sugges.
Good verbal participation	Low verbal participation

Visual, Auditory, Motor Skills

Uses large muscles well	Poorly coordinated, awkward
Adequate listening attention span	Seldom listens attentively
Good eye-hand coordination	Poor in small muscle tasks
Sees likeness in forms and shapes	Poor visual discrimination
Good auditory discrimination	Confuses sounds and words
Stamina and endurance	Easily fatigued
Has good vision or corrective lenses	May have a vision problem pro
Normal posture	Poor posture
Has normal auditory acuity	May have a hearing difficulty

Additional Comments

7-27-66

Application for Admission (Secondary Only)
Part 3

Student ____________________ School ____________________

Teacher Assessment Report

Your evaluation of school performance is a major factor in determining whether or not this student will be placed in our program. Be as specific and comprehensive in your comments as you can. Include any information which will be helpful in understanding this student in terms of performance, attitudes, strengths and weaknesses. Under additional comments we would appreciate any other insightful information which might not fit the catagories listed below.

- Comments by each of the student's teachers

Subject ____________________ Teacher ____________________

Subject ____________________ Teacher ____________________

Subject ____________________ Teacher ____________________

Subject ____________________ Teacher ____________________

Subject ____________________ Teacher ____________________

Subject ____________________ Teacher ____________________

Subject ____________________ Teacher ____________________

Additional Comments:

7-29-66

LEARNING CENTER

RIVERSIDE UNIFIED SCHOOLS

TEACHER ASSESSMENT REPORT Date_______________

The student listed below has been referred to the Learning Center. Your evaluation of school performance will assist in his appropriate placement.

Student_______________________________________Grade__________Age____________

Teacher_______________________________School___________________Date________

SUBJECT	PERFORMANCE	COMMENTS
Reading		
Spelling		
Handwriting		
Arithmetic		
Physical Education		
Coordination		
Participation		

Comments: (Include any information which will be helpful in understanding this student. Social adjustment, likes, dislikes, strengths and weaknesses.)

Daily Program Schedule

Teacher__________________________School________________________Grade_____________

To assist us in planning appropriate placement for pupils at the Learning Center, we need to know how the instructional program usually proceeds at his home school. Please briefly describe your school day.

Time	Instruction

9-7-66

LEARNING CENTER
RIVERSIDE UNIFIED SCHOOLS
[illegible]

FAMILY HISTORY

Date ____________________

Student ____________________ Birthdate ________ Age ____ Sex ____ Grade ____________

Address ____ Phone ____________

School ____________________________ Teacher ____________________

Any complications during pregnancy? ______________________________

Walked at ______ months? Talked at ______ months?

Any speech problems? ______________________________

Natural or adopted? ______________ Single or multiple birth? ______________

Ever been unconscious? ______________________________
(cause and duration)

Enuresis? ____________________ Nervousness? ______________

Frequent colds? ______ Frequent headaches? ______ Frequent fatigue? ______________

How is appetite? ______ Eat breakfast? ______ How much milk per day? ______________

Date of last physical exam ______________ Circumstances and results? ____

____

Food preferences ______________________________

Has vision ever been checked by a physician? ______________________________

Findings? ______________________________

Has hearing ever been checked by a physician? ______________________________

Findings? ______________________________

Hours of sleep per night? ______________________________

Hand used for eating? ____________ for writing? ____________ for play? ____________

Foot used for kicking? ______________ Has handedness ever been changed? ________

Any medicine being taken now? (What and why) ______________________________

Any languages other than English spoken in home? ______________________________

Did teeth erupt early? ______________ Any difficulties? ______________

4-18-66

Family History Con't.

Parents: (both natural or - specify relationships ________________________________)

	Mother	Father
Name		
Age		
Occupation		
Last grade completed in school		
Other training or study		
General health		
Serious illnesses		
Reading problems and/or other reading difficulties		

Siblings: (List in order of age - oldest to youngest)

	(1) oldest	(2)	(3)	(4)	(5)
Name					
Age and Sex					
General health					
Serious illnesses					
Reading problems					
Behavior problems					

Please use this space to comment on any behaviors, attitudes or experiences which may have affected your child's learning.

4-19-66

LEARNING CENTER

RIVERSIDE UNIFIED SCHOOLS

REPORT OF NURSE Date________________________

School____ Nurse_________________________________

Pupil's Name____________________ Sex________ Grade________ Birthdate__________________

Height: __________Inches Weight: __________Pounds Date ______________________

Comments:

Vision: Date_______________________ Right eye______________Left eye______________

Corrected Right eye______________Left eye______________

Wears glasses__________________________

Hearing: Date_______________Pure Tone Exam_____________R. Ear_______L. Ear ________

Hearing defect____

Comments:

Teeth:

Nutritional Conditions:

Physical Education Program: Normal________ Restricted____________Excused____________

Comments:

Health History:

Serious Illness:____Age _____

Accidents:____Age _____

Operations:____Age _____

General Physical Appearance:

Home Information:

Comments:

Signature of Nurse_________________________________

6-20-66

LEARNING CENTER

RIVERSIDE UNIFIED SCHOOLS

PROGRAM RECOMMENDATIONS

Name______________________________

Level______________________________

Date Entered______________________

Psychologist's Recommendations: Date______________________________

Gross Motor:

Visual Motor:

Perceptual Motor:

Remediation - Developmental:

Speech and Hearing Pathologist's Recommendations: Date______________________________

Teacher's Recommendations: Date______________________________

Riverside Unified Schools

The Learning Center

Speech Pathologist's Report

Name______________________________________ Date____________________

Evaluation

Training

Recommendations

____
Clark R. Adamson, Speech Pathologist

Name______________________________Age______Date____________________

Tests: I.T.P.A.

(1) Auditory-Vocal Automatic

(2) Auditory-Vocal Association

(3) Vocal Encoding

(4) Auditory-Vocal Sequencing

(5) Auditory Decoding

Wepman Auditory Discrimination Test

Templin-Darley Articulation Test

Hearing Evaluation

Comments:

____

Hearing and Speech Pathologist

Diagnostic Test Assessment

Name ____________ C.A. ____ Grade ____ School ____________ Date Entered Learning Center ____________

Psychological Tests

Date ____________ Stanford Binet, Form L-M C.A. ________ M.A. ________ I.Q. ________

Date ____________ WISC C.A. ________ Verbal Scale I.Q. ________ Performance Scale I.Q. ________ Full Scale I.Q. ________

Date ____________ I.T.P.A. ________ ________ ________ ________ ________ ________ ________ ________ ________

Date ____________ Bender-Gestalt

Perception and Laterality Tests

Date ____________ Frostig Developmental Test - Age Scores V.M. ______ F.G. ______ S.R. ______ F.C. ______ P.S. ______ P.Q. ______

Date ____________ Harris Laterality Test Hand ________ Eye ________ Foot ________ Dominance ________

Date ____________ Leavell Test for Lateral Dominance Hand ________ Eye ________ Foot ________ Dominance ________

Reading and Achievement Tests

Date ____________ Metropolitan Achievement Test Form Battery Level Word Know. Word Dis. Reading Spelling Arith.

Date ____________ Durrell Analysis of Reading Difficulty Oral Read. Silent Read. Listening Flash Words Word Analys Spell

Date ____________ Standardized Reading Paragraphs (Gray) Raw Score ____________ Grade Score ____________

Date ____________ Jastak Wide Range Achievement Reading Grade Score ____________

Speech and Hearing Tests

Date ____________ Templin Darley Articulation Test Audiometer R. ____________ L. ____________

Date ____________ Wepman Auditory Discrimination Test Other:

Date ____________ Word Synthesis and Auditory Memory Span

Riverside Unified Schools
The Learning Center

Final Progress Report

Student's name____________________________Grade_______School______________________

Attendance Period: Began___________________Left_______________

Areas of Significant Progress:

Informal or Classroom Assessment of Performance in: reading, spelling, writing, arithmetic, language development, perceptual training, motor skills, etc.:

Work-Study Skills:

Attitudes and Personal Adjustment:

Materials Used and Achievement:

Specific Areas of Remedial Help Still Needed:

Recommendations For Instruction:

Date____________________

LEARNING CENTER
RIVERSIDE UNIFIED SCHOOL DISTRICT
PARENT CONFERENCE REPORT
(Final Report)

Student's Name____

Areas of Instructional Need (specific difficulties observed):

Progress in Clinic Program:

Attitude

Interest

Effort

Achievement

Recommendations:

Teacher's Signature____

LEARNING CENTER
RIVERSIDE UNIFIED SCHOOLS

The application of admission for ____________________________________from

______________________School was received at the Learning Center on ____________.

____
Phyllis W. Dole
Director, Learning Center

The Learning Center
Riverside Unified School District
Release of Confidential Information

Date________________

I give my permission for ___________________________________ to release

information regarding ____________________________ to _______________________

of ___________________________.

____
(Signature of Parent of Guardian)

RIVERSIDE UNIFIED SCHOOL DISTRICT
Riverside, California

LEARNING CENTER

NOTICE OF ATTENDANCE AT LEARNING CENTER

Name: Age: Sex:

Birthdate: School:

The above named student will attend Riverside Unified Schools' Learning Center. Attendance will begin on ________________.
(date)

____
Phyllis W. Dole
Director, Learning Center

Learning Center

Riverside Unified Schools

____________________ of ____________________School

has been considered for admission to the Learning Center. His referral has been dropped because ____

____.

Sincerely,

Phyllis W. Dole
Director, Learning Center

THE LEARNING CENTER

RIVERSIDE, UNIFIED SCHOOLS

Date________________

Name____School___________________________

The above student has been returned to regular class. We would appreciate the classroom teacher's evaluation of the student's performance in school and social and personal adjustment.

Has___________________been able to adjust to regular classroom procedures?

Is__________________behavior generally acceptable?

Has___________________found a place in the peer group? Found friends?

______________________may not be at grade level, however, is the student able to follow through on assigned tasks at his learning level? Is ______________ working with a group within the class, or must work be planned entirely separately?

Additional Comments:

The Learning Center
Riverside Unified Schools

School Volunteers
Objectives

1. To supplement the work of the classroom teacher, upon his request and under his supervision:
    a. To extend his professional effectiveness by relieving him of some of the time-consuming, non-teaching tasks.
    b. To supplement and enrich the educational program by providing services beyond the usual scope of the school or for which school personnel are not available.
2. To enhance community understanding of school needs, and to promote better school-community relations.
3. To allow capable people interested in community service to serve children:
    a. By helping students to successfully accomplish assigned lessons.
    b. By working directly with individual children who need one-to-one guidance.
    c. By using creative, innovative ideas to encourage discouraged children.

Policies

1. The volunteer is guided at all times by school policy, which he neither makes nor violates.
2. She or he serves under the direction of school personnel, but never substitutes for them.
3. The volunteer augments the work of paid school personnel, but never substitutes for them.
4. Volunteers undertake only such direct services in the school as may be carried on by volunteers.
5. Personal and/or confidential information regarding students or their families must be kept in strict confidence.

The Learning Center
Riverside Unified Schools

Information Sheet for Volunteers

Date________________

1. Name____Spouse______________________
   Last (Please print)   First

2. Home Address___________________________________Zone_____Home Phone_______

3. Business Address____________________________________Business Phone_______

4. Person to be Notified in Emergency______________________________________
   Name   Address   Phone

5. Age (Check one): Under 20____ 21-40____ Over 60___

6. Physical or other limitations, if any____________________________________

7. Children: Number____ Ages____ Schools now attending______________________

EDUCATION

8. Elementary School____High School____College______________Course____________

   Student at present____School___________________Course of Study___________

WORK EXPERIENCE

9. Type of work (e.g. teacher, doctor, buyer, secretary, etc.) How long employed: ____

   ____

   ____

VOLUNTEER EXPERIENCE

10. Name of Organization   Length of Service   Nature of your Service

    ____

    ____

11. Indicate areas in which you wish to serve as a Volunteer:

    __________Enrichment

    Dramatics; crafts, music; art; storytelling; ceramics; handcrafts; science; instrumental music; etc.

    ____

____Educational

Remedial Teaching____

____

____Clerical

____

____Others (Specify)

____

12. WHEN (DAYS AND TIMES) ARE YOU AVAILABLE TO SERVE REGULARLY EACH WEEK? If more than once, please indicate your preference:

____

____

13. REFERENCES: Please give at least one professional (doctor, principal, lawyer, minister, educator) as a reference. References should be persons not related to you who have known you at least two years.

Name (Please print)	Address	Phone
1)		
2)		

(Do not fill in.)

14. Service Started____________________Assignment____________________

Service terminated____________________Reason____________________